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April 1958

SCHOOL MANAGEMENT

PRACTICAL SOLUTIONS TO SCHOOL MANAGEMENT PROBLEMS

How to help your graduates get into college

The truth about MULTI-PURPOSE ROOMS

A CURRICULUM REPORT

SEE COMPLETE CONTENTS ON PAGE 3

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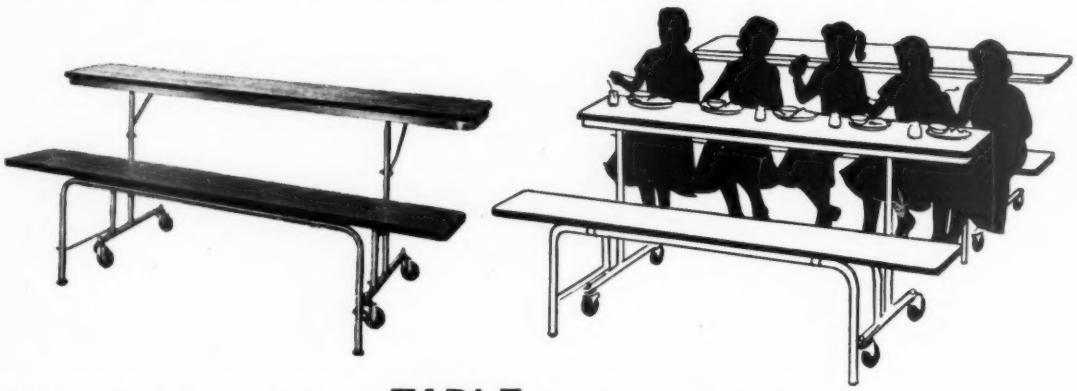

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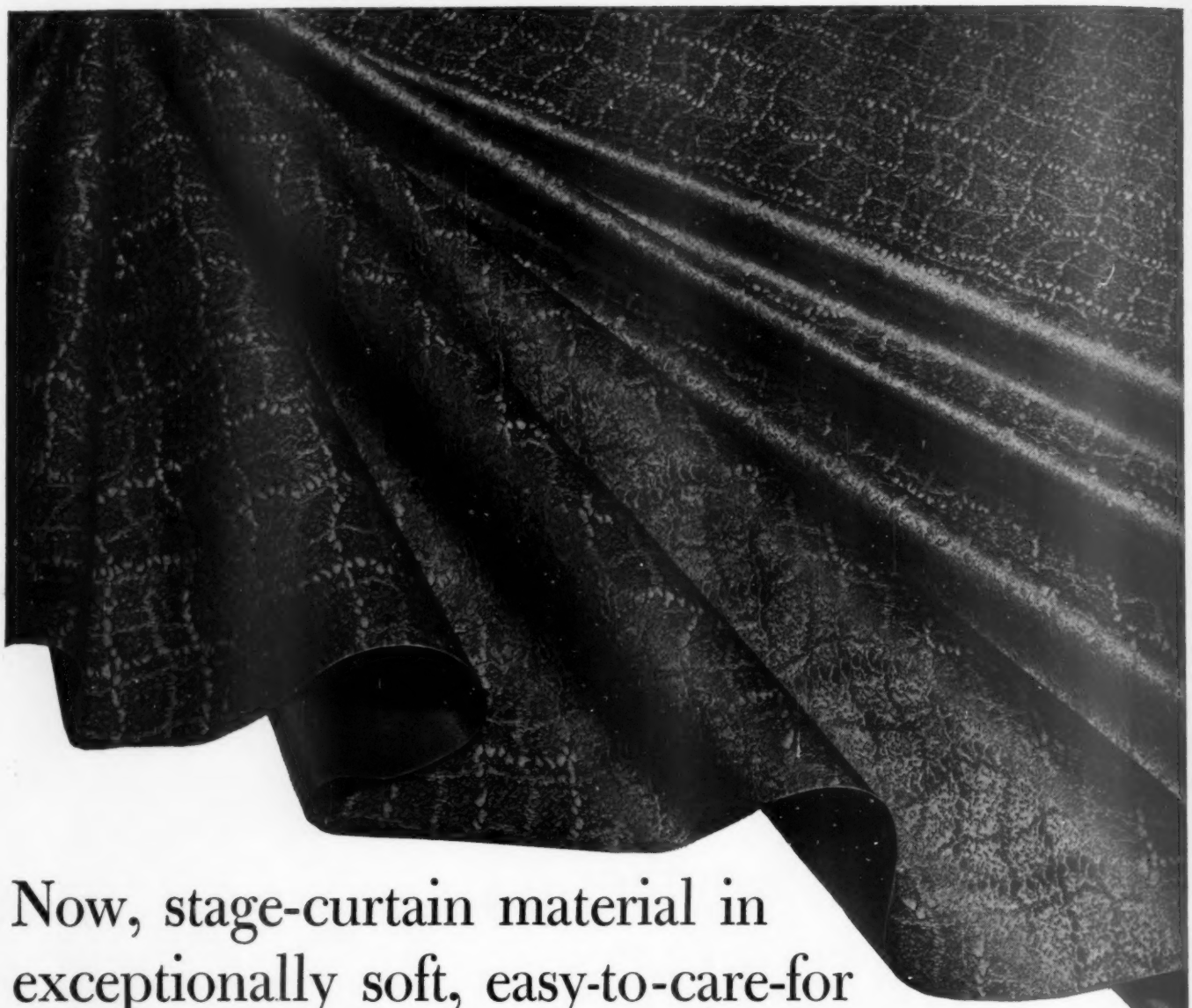

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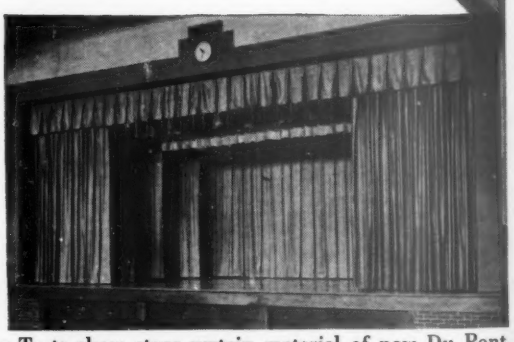

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Vol. 2 No. 4

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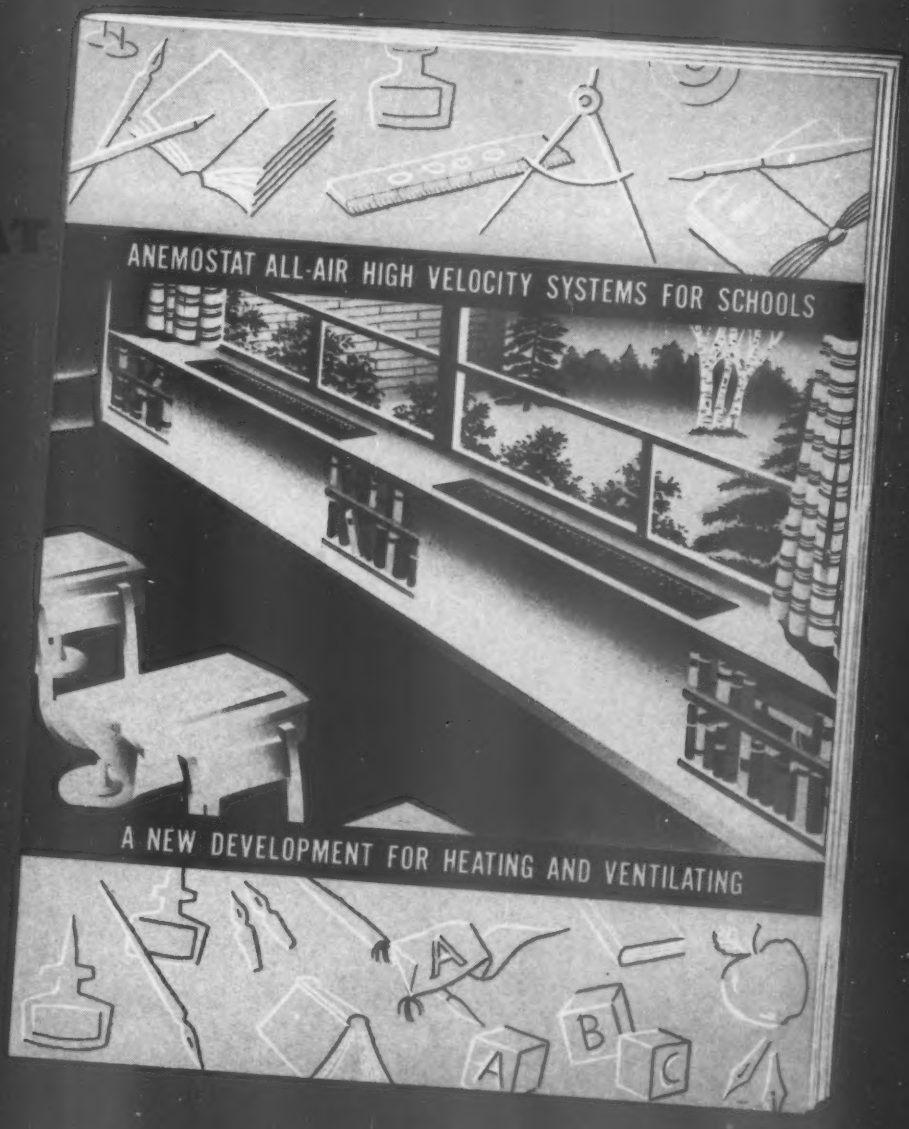

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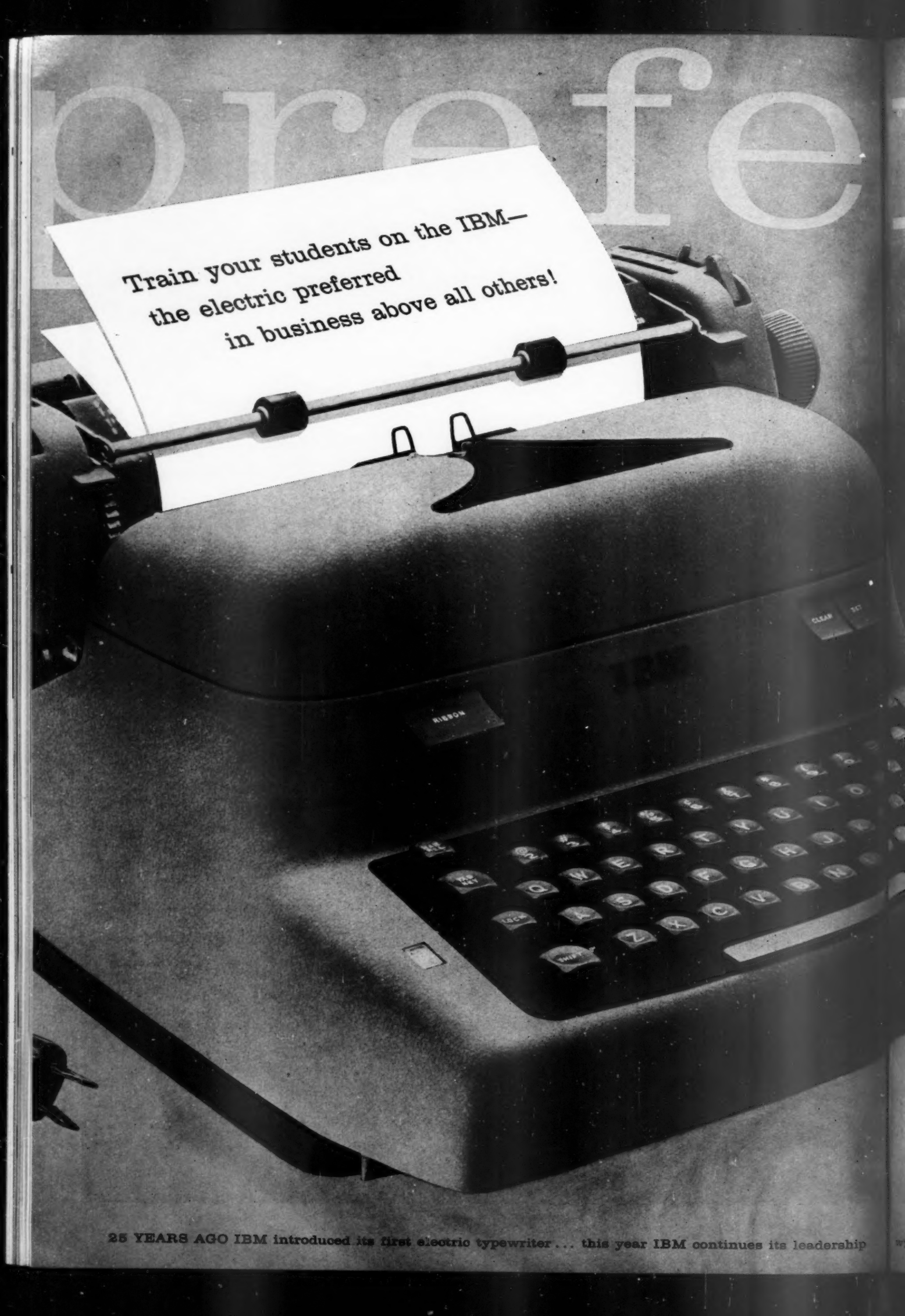

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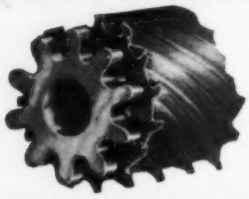

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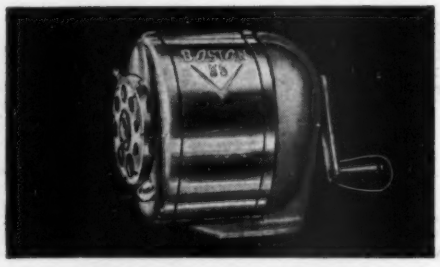

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Students organize noon-time activities

■ ■ ■ Students at the Hawthorne Junior High School, Wauwatosa, Wis., have solved the problem of keeping occupied during noon hour. Unlike most schools in the area, where nothing of an organized nature is undertaken during the after-lunch period, at Hawthorne a regular program of activities is scheduled and run-off under the aegis of the student council.

The effect of the program has been to almost eliminate vandalism and mischief and to relieve many teachers of lunch duty.

The cafeteria at Hawthorne is used every day by an average of 325 of the school's 430 students. Student help is utilized to sell hot meals, serve them and stack dishes for clean-up.

Once lunch is out of the way, the students convert the cafeteria into a game area. Checker and chess sets are provided, cards made available and other quiet activities encouraged. Some pupils, it has been observed, even choose to study during this period.

At the same time the students have arranged for the library to be kept open for those who wish to browse and the gymnasium is in constant use for intramural basketball. This later will shift to volleyball, swimming and baseball as the weather changes. A table tennis project is underway at the present time, with instructors helping those who want to learn the game. As soon as enough top players are available, an intramural program will be instituted in that sport.

When the school's new auditorium, now under construction, is complete, movies will be shown twice each week. Students will pay 50¢ for a season's ticket, entitling them to see 13 films.

Highlight of the noon-hour activities is a mixer dance held in the gym every Friday. The student council takes direct charge of this affair, meeting briefly just prior to it to select persons to set up the room for the dancing and to put it back together again when the student revelry is ended.

The record-player is run by a student who also contributes his own stack of records to the festivities. At one point dancers were asked to contribute a penny admission to the affairs to raise a fund for new records. This admission charge has been temporarily discontinued in favor of student contributions of records from home.

Principal C. L. Carter of Hawthorne, has given his full approval to the lunch hour activities, noting with pleasure the way the students have organized to help their school. **End**

The intricacies of chess *are studied during one of Wauwatosa's student-conducted lunch-hour sessions. Checkers, cards, reading, quiet talk and studying are also encouraged.*

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Basic information that schoolmen can use as a part of a community education program

Getting into college

■ ■ ■ Few secondary school administrators need to be told just how hard it is for their graduates to get into the colleges or universities of their choice, but sometimes they are hard put to explain it all to parents who can't understand why their child was turned down.

Here are some facts which vividly illustrate the problem, and explain some of the criteria by which overcrowded US colleges are accepting students.

(See also the story on page 31, "What high schools can do to get their graduates into college.")

How crowded?

First of all, just how crowded are colleges? The country's college population has tripled—from one million to three million—in the past 25 years. Colleges have not enlarged their facilities in proportion. Many private ones don't want to. Says Provost F. F. Hill of Cornell: "A private institution is likely to make the greatest contribution to society . . . if it concentrates on doing a quality rather than a quantity job."

During the 1956-57 academic year, a good many colleges turned away nine freshman applicants for every one they accepted. At best, few institutions of higher learning had less than three applicants for every opening in the freshman class.

Princeton had 4,000 applicants for 750 openings, Amherst (see page 35) accepted only 250 candidates out of a field of 1,400, Columbia had 2,700 applicants for 650 openings. Pembroke, a small college for women, accepted only 204 of 1,500 applications.

No relief is in sight. In 1960, the first of the World War II baby crop—which has inundated elementary and secondary schools during the last decade—will reach college age. The US Office of Education predicts college enrollment applications will triple again during the next 12 years.

With so much to choose from, colleges have uniformly set high secondary school grades as the first requirement for admission. What other criteria are there? Personality, character and extra-curricular achievements have become considerably more important. A student makes high grades, but what else can he do? Is he "well-rounded?"

For instance:

The 776-man 1955 freshman class at Princeton contained 117 presidents of high school classes or student governments, 87 high school class valedictorians, 103 editors-in-chief of school publications, 82 members of debating clubs. In addition, these 776 college freshman had, while in high school, earned 487 varsity letters in four major sports.

Dartmouth's freshman class of 751 two years ago contained an equally impressive percentage of extra-curricular achievers. Altogether, they had won 941 letters in 18 sports; 115 of them were team captains, 84 co-captains. There were 164 class or student government presidents, 87 edited school publications, 269 were members of high school theater groups, 52 were interscholastic debaters.

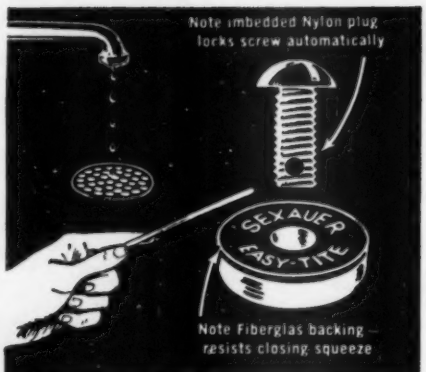
Another factor, and one which probably handicaps as many college-bound high school graduates as it helps, is geography. Colleges seek an ever-broadening representation of backgrounds and interest among students. At Harvard, for instance, New Englanders made up 75% of the student body immediately after World War II. Today, less than a third are from New England. This helps a western high school graduate who wants to go to Harvard, but curtails the chances for the New England boy who seeks to enroll.

Public vs. private

Graduates of private preparatory schools, which can limit their facilities to students of above-average ability, make up a sizeable percentage of total college enrollment, although the percentage of public school graduates accepted is on the increase. Sixty percent of Yale students are from private secondary schools. The percentage is lower, but sizeable, at several others—Harvard 45%, Princeton 47%, Wellesley 51%, Dartmouth 33%.

Although institutions do not publish the fact that they give preference to sons and daughters of alumni, it can be a factor and may tip the scales for a student "all other considerations being equal," as one Ivy admissions director explained it. In tradition-laden colleges like Princeton, sons and daughters of old grads may account for 17% of the student body. **End**

Clip this page for future reference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SIR: Last October I received your first complimentary copy of SCHOOL MANAGEMENT and have received each issue thereafter, for which I wish to thank you.

I did not recommend the magazine to the other Guilford Township directors until I was certain that you would carry impartial articles. Enclosed herewith is a check for $30.00 for five subscriptions to SCHOOL MANAGEMENT; the addresses of the board members are attached. I am taking the liberty to enclose some personal observations on school construction costs which you may use as you see fit.

MURRAY E. KAUFFMAN
SCHOOL DIRECTOR
GUILFORD TOWNSHIP DISTRICT
FRANKLIN COUNTY, PA.

■ *Here are some excerpts from Mr. Kauffman's remarks:* ED.

"How can the construction cost of school buildings be kept down? This question is asked by every school board throughout the country and enters the mind of the taxpayer when he makes his annual school contribution. Having served as a school director on two elementary and two high schools building projects, I feel that this question is incorrectly posed. 'How much can we afford to spend?' should be the approach and should be answered before the architect draws the plan and before the administrator inserts his demands. The figure set must not be deviated from.

"Budgeting is the proper approach. If, after viewing local and state-wide construction costs, the board feels that $1,700 per pupil (high school) is the amount which it can afford for the quality and design desired, it should serve notice to every person considered in determining the cost. If the budgeted figure is exceeded these persons should know they will be required to redesign until the $1,700 is reached.

"Although the local board can be expected to disagree on certain phases, the fact that it has limited itself will demand restraint. I would suggest that, after arriving at a per pupil cost ceiling, boards be required to locally advertise the cost limitation and hold public hearings to defend their position. The local district must establish its area costs, desired quality and design, and taxing limitations. With a concrete platform to qualify themselves, I see no reason why board members can't publicly defend their position or adjust it." **End**

Others will want to know . . .

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SCHOOL MANAGEMENT'S most valuable editorial material can come only from people who are actually confronted with school management problems and are finding ways to solve them. And that means people like you.

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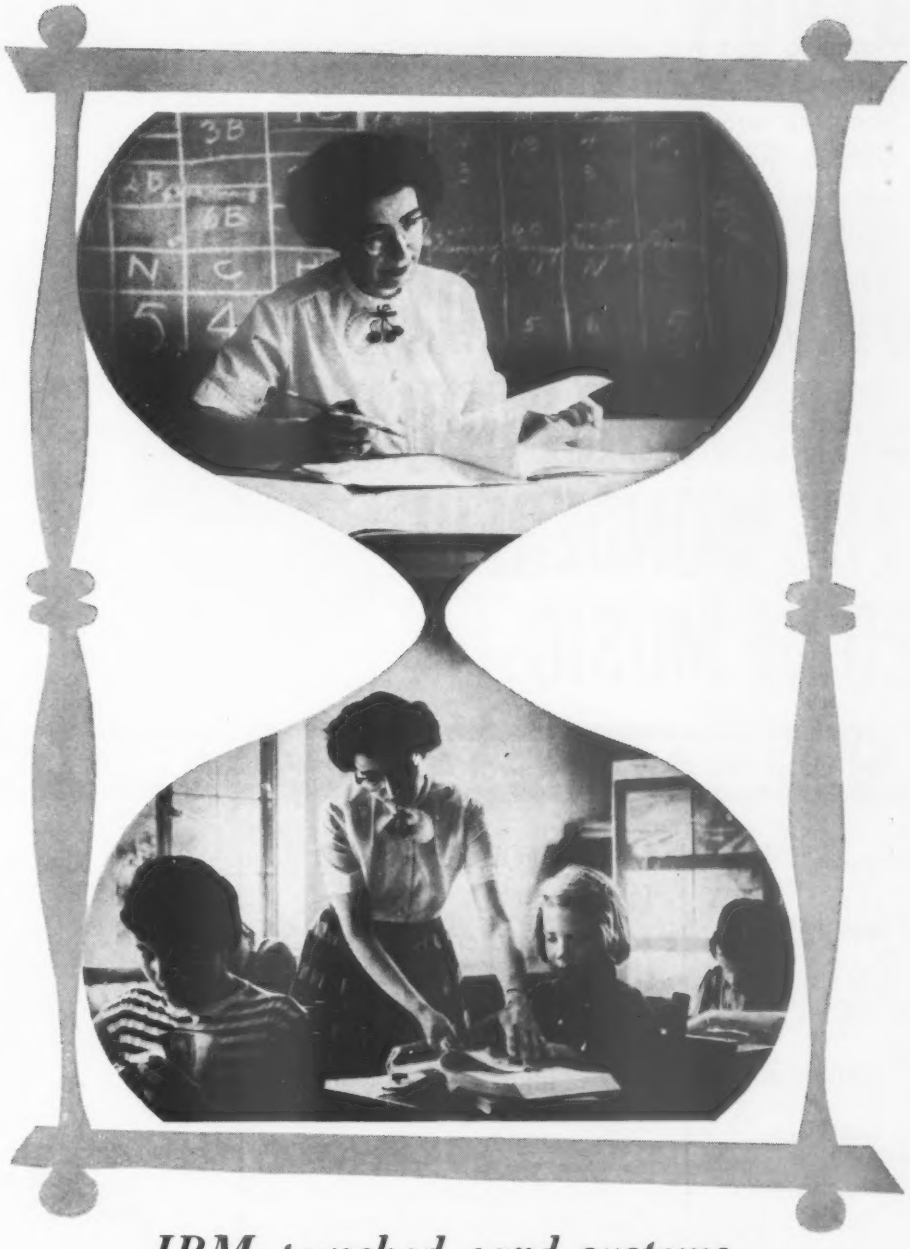

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At a New York State high school, it once took 70 teachers five school days to register and program 1300 students at the beginning of each term. Now, with IBM methods, all pupils are completely scheduled *the day school opens.*

Free *your* teaching staff, too, of time-consuming clerical chores. Let speedy, low-cost IBM punched card methods slash *three or more hours* from teachers' routine clerical duties—*every week.*

Vital student records—such as attendance rosters, report cards, progress evaluations, and registration schedules—are prepared in a fraction of the time usually required, when IBM systems go to work for you.

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ELECTRIC TYPEWRITERS
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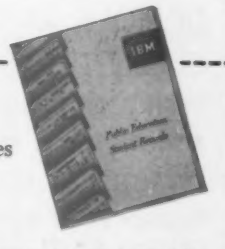

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Please send copy of your FREE booklet "Public Education Student Records" to:

Name_____

Address_____

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(For more information, see last page)

Columbia has a vast collection of records especially designed for students—to teach, interest and help them from their earliest age to develop a rich appreciation of the world and its music. Following are just **some** of the exclusive Columbia recordings in Guaranteed High Fidelity recommended for school use.

LET COLUMBIA RECORDS INTRODUCE YOUR PUPILS TO THE WONDERFUL WORLD OF MUSIC

COLUMBIA ® RECORDS

MUSIC OF OUR COUNTRY

SONGS OF THE SOUTH:
The Norman Luboff Choir CL 860 ($3.98)

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The Norman Luboff Choir CL 657 ($3.98)

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The Norman Luboff Choir CL 948 ($3.98)

THE CONFEDERACY by Richard Bales DL 220 ($10.00)

THE UNION by Richard Bales DL 244 ($10.00)

MUSIC FOR LEARNING ($3.98 each)

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Lucienne Vernay with Les Quatre Barbus CL 675

HAPPY INSTRUMENTS CL 1026

PETER, TUBBY AND PAN CL 671

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Tom Glazer with Orch. and Chorus CL 670

COLUMBIA WORLD LIBRARY OF FOLK AND PRIMITIVE MUSIC ($5.98 each)

Compiled and Edited by Alan Lomax

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AND MANY MORE!

HF-1

HF-2

Both Columbia Phonographs are noted for excellence of sound reproduction. Their sturdiness and portability make them ideal for classroom and auditorium use. Both play all 3 speeds, have extremely powerful amplifiers and 30-foot extension cords. The HF-1 has two 6″ speakers. The deluxe model, HF-2, has two 8″ speakers, microphone with separate fading control for P.A. system use, and storage space for an earphone attachment.

HF-1 $89.95 HF-2 $129.95

Available again! How to Use Records to Help You Teach, by Louise Whaley—the popular, completely revised reprint from April 1956 Grade Teacher. To get yours, write: Box SM-458, Educational Dept., Columbia Records, 799 Seventh Avenue, New York 19, New York.

(For more information, see last page)

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WHERE TO GET HELP

A guide to useful information

This School Management service is designed to screen important new factual material available to school officials and to tell where it can be obtained. Ed.

EDUCATIONAL TV

A complete guide. TV is coming into its own as a valuable educational tool. A 124-page book presents the over-all view of TV as applied to education. It covers what is being done in educational television and explores the enrichment program TV can bring to schools.

Chapters tell how a community can help plan for educational television and how a TV station can develop essential services. It also discusses various approaches to direct teaching by TV.

Several appendices include such useful information as listings of educational television stations, new books on educational television and typical daily educational TV schedules.

TELEVISION IN EDUCATION. *Bulletin 1957, No. 21, US Dept. of Health, Education & Welfare. Order from Supt. of Documents, Government Printing Office, Washington 25, D.C. 25¢.*

How to plan for educational TV. Any school district planning to use TV as a teaching medium will find this workman-like kit helpful.

The folder contains a wealth of material compiled by RCA—booklets and reprints of articles on all phases of the subject. Experiments, concrete case histories and catalogs of equipment are included. Sections cover how and where to use TV teaching effectively, how to plan and set up a large or small system from master control room to teaching studio. Charts illustrate how to arrange basic equipment.

For a free TV kit, circle number 792 on the Reader Service Card.

PURCHASING

Guide for procurement. The Handbook of Public School Purchasing has been issued by the California Association of Public School Business Officials as one in a series to foster better school business management.

This manual is designed to increase the efficiency of those already in school procurement and to help train people entering the field.

The handbook does a thorough job of presenting all aspects of purchasing. The opening chapter covers the legal basis for operation—bids, contracts, approval of forms and awards. Other subjects discussed are: purchasing ethics, administration policies, forms and office procedures, tests and specifications.

A valuable, comprehensive 96-page guide to expedite good administration of school purchasing.

HANDBOOK OF PUBLIC SCHOOL PURCHASING. *Order from California Association of Public School Business Officials, 111 N. Grevillea Ave., Inglewood, Calif. $2.50*

SCIENCE TEACHING

Films on atomic energy. Students everywhere evidence much interest in atomic energy. To further this interest, there are many films available from the AEC on the peaceful uses of atomic energy.

A list of all available titles is offered. High school principals and science teachers can requisition any of these films on a 10-day loan basis, free of cost save for return postage. Films desired for a specific date should be requested well in advance, listing three films in the order of preference.

LIST OF ATOMIC ENERGY FILMS. *Order from Public Information Officer, US Atomic Energy Commission, Oak Ridge Operations Office, Box E, Oak Ridge, Tenn. Free.*

PUBLIC RELATIONS

Pictures mold public opinion. A poignant picture of pupils huddling their way through driving rain can influence the community to vote more money for school bus routes. There are many ways good photographs can help tell your school's story.

Editors of *Look* magazine have written a 72-page handbook on how photography can stir public interest in vital school problems.

This guide presents typical school

PROTECTION
for terrazzo that means extra years of floor life

Huntington Terrazzo Seal produces a non-porous, non-skid surface.

Get years of extra wear from terrazzo floors with *Huntington Terrazzo Seal*. It helps to prevent unsightly cracks and pitting, seals in color and beauty, protects against the deteriorating effects of cleaning agents and traffic. Alkalis and alkali salts won't affect it. And because it's non-slippery, the floor is safer to walk on, resists scuffs and scratches. Saves labor time and maintenance costs, too. Write for information today.

Spal Concentrate Detergent . . . a soapless synthetic that cleans quickly, leaves no film. Won't crystallize and cause pitting.

Ask for the Man Behind the Drum . . . your Huntington representative.

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HUNTINGTON

(For more information, see last page)

More school people are learning that you can

ELIMINATE NEEDLESS COSTS and IMPROVE EQUIPMENT QUALITY

In 1958, the farsighted, *value-minded* school boards are walking off with the *real* "bargains" in classroom heating and ventilating comfort. To learn more about how you can get the most advanced hot water system *within your present budget* read below:

ECONOMY

Compared with the installed cost of some other systems, the Nesbitt Series 1ot Water Wind-o-line system saves as much as 20% on construction, equipment and installation costs. Each classroom has its own Nesbitt Syncretizer for heating, ventilating and natural air cooling. And Nesbitt Wind-o-line fin-tube radiation extends along the sill to protect students sitting near windows against cold walls and window downdraft. Each student enjoys the full measure of thermal environment most conducive to optimum learning . . . whether he sits near the window or at the other side of the room.

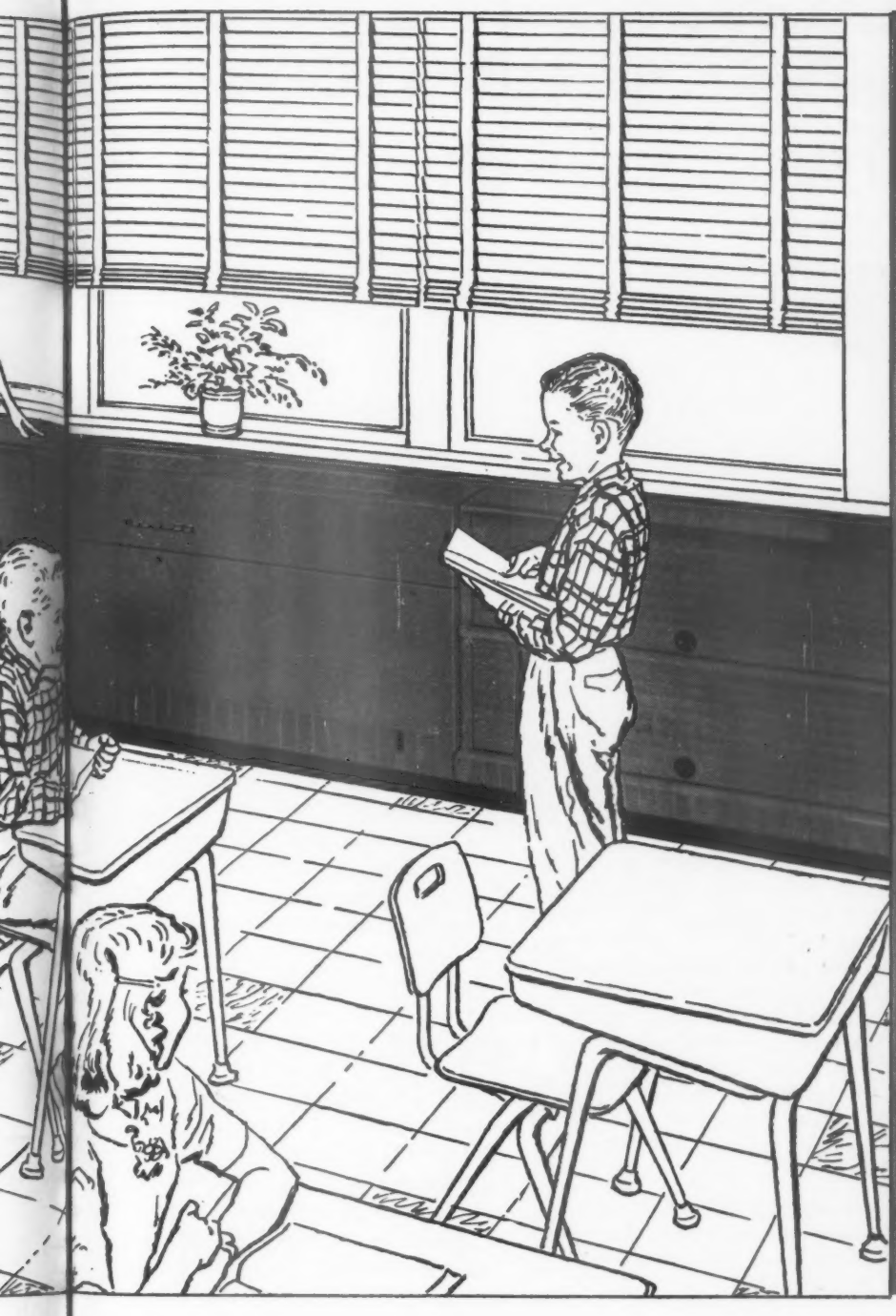
PERFORMANCE

No other unit ventilator provides *controlled* heating, ventilating and natural cooling as effectively as the Nesbitt Syncretizer. Add to this the advantages of Wind-o-line radiation and you have two-way Nesbitt protection against (1) excessive radiant loss of body heat and (2) chilling downdraft.

This unique *double* protection is your assurance of healthful, productive comfort—free of physical distraction—for every child in the room, wherever his seat is located. *Only the comfortable student can maintain maximum learning efficiency.*

QUALITY and VERSATILE DESIGN

The copper tubing of the Nesbitt Wind-o-line radiation does double duty by serving as the supply and return mains for the Nesbitt Syncretizer in each classroom. And that means *double* savings for you on pipes and coverings, and the elimination of expensive pipe trenches, mains and runouts. Because less hot water circulates, smaller and less costly pipes and pumps are needed. Piping within the Syncretizer units is factory-assembled, labor on the job is reduced. Gravity heating maintains overnight temperature, saving money on controls. Sum total of these economies: the best in *controlled* heating and



THESE SCHOOLS CUT COSTS...and improved quality

In New York **$1.57 sq. ft.**

Myron Avenue Elementary School, Tonawanda, N.Y.
Architect: Fenno, Reynolds & McNeil, Tonawanda, N.Y.
Engineer: Jacobus & Babinski, Buffalo, N.Y.
Gross Area: 15,100 sq. ft.
Total Contract: $256,119.00
Heating & Ventilating: $23,681.00
Nesbitt Series Hot Water Wind-o-line System with Wind-o-line Radiation concealed by storage cabinets as shown at left

In Colorado **$1.48 sq. ft.**

Machebeuf High School, Denver, Colorado
Architect: John Connell, Deceased
R. James Noone, Denver, Colorado
Engineer: Marwi S. Wilson, Denver, Colorado
Capacity: 550 pupils
Gross Area: 48,390 sq. ft.
Total Contract: $523,200.00
Heating & Ventilating: $71,833.00
Nesbitt Series Hot Water Wind-o-line Radiation

In Maryland **$1.57 sq. ft.**

Stephen Knolls Elementary School, Montgomery Co., Maryland
Architect: Bailey & Patton, Rockville, Maryland
Engineer: Redmile, Corab & Wood, Washington, D.C.
Capacity: 450 pupils
Gross Area: 28,037 sq. ft.
Total Contract: $394,686.00
Heating Contract: $44,025.00
Nesbitt Series Hot Water Wind-o-line System eliminated pipe trenches—put all piping above floor for maximum accessibility

ventilation for your school at a cost that's way down . . . with quality that's way up for every classroom.

SCHOOLS IN MODERATE CLIMATES

In parts of the country where daytime winter temperatures rarely fall below 20°F., Wind-o-line Radiation may not be necessary because outside window walls do not create special comfort problems. In such areas, Nesbitt offers the Mainline System. It offers the economies of the series piping arrangement without sacrificing quality.

Send for the big book, packed full of information on the value of *controlled* classroom ventilation, ***More Learning per School Dollar.***

Nesbitt

THERMAL COMFORT ALL WAYS

More learning per school dollar

Made and sold by John J. Nesbitt, Inc., Philadelphia 36, Pa.
Sold also by American Blower Corporation and by American Standard Products (Canada) Ltd.

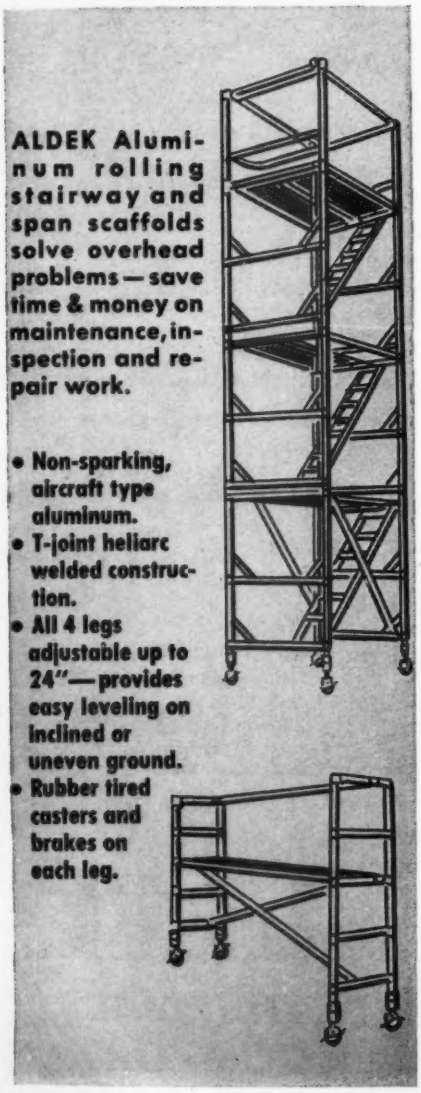
(For more information, see last page)

ALDEK

ALUMINUM SCAFFOLDS

put faster, safer maintenance within easy reach

Only a few minutes to erect ... Stores in small space.



ALDEK Aluminum rolling stairway and span scaffolds solve overhead problems—save time & money on maintenance, inspection and repair work.

- **Non-sparking, aircraft type aluminum.**
- **T-joint heliarc welded construction.**
- **All 4 legs adjustable up to 24"—provides easy leveling on inclined or uneven ground.**
- **Rubber tired casters and brakes on each leg.**

Write for full information on ALDEK Aluminum scaffolds, stages and industrial ladders.

ALUMINUM Safety PRODUCTS, INC.

Dept. SL-4, 289 Fifth Avenue, New York 16, N. Y.

(For more information, see last page)

situations and how to go about interpreting them through photography. It details ways to capture attention, interest and conviction with creative pictures and captions. The book shows how photographic school coverage can be accomplished with minimum equipment at low cost.

SCHOOL PHOTOJOURNALISM—TELLING YOUR SCHOOL STORY WITH PICTURES. *Order from National School Public Relations Association, 1201 16th St., N.W., Washington 6, D. C. $2.*

LIGHTING

Good lighting guide. A brief non-technical outline of the essentials of good school lighting. It answers questions of how much light is needed, what factors influence comfortable lighting and comparative costs.

A chart is included on recommended levels of light for efficient illumination of classrooms and all secondary areas.

WHAT TO LOOK FOR IN SCHOOL LIGHTING. *Garcy Lighting, 2475 Elston Ave., Chicago 47, Free.*

LANGUAGES

Oral method for young children. Here is a booklet designed to assist and encourage elementary school instruction in any modern language. It presents not only the theory but the practice of teaching languages by the oral, or direct, method. Speaking and understanding the spoken word is stressed.

With interesting case histories, it covers the problems of introducing this oral system, the results, its values and acceptance by both parents and children.

FLES—FOREIGN LANGUAGES ELEMENTARY SCHOOLS. *Massachusetts Council For Public Schools, 16 Arlington St., Boston 16, Mass. 33¢*

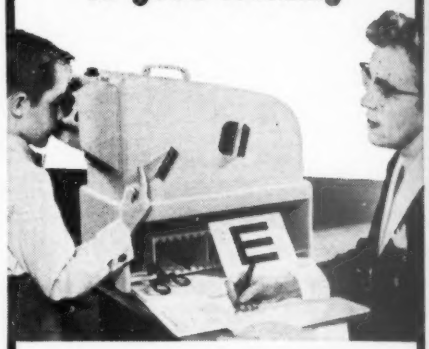
CONSTRUCTION

For daylight control. A well-illustrated 20-page booklet telling how glass blocks and panels can select and direct light rays for uniform brightness without glare is being offered by Owens-Illinois.

Diagrams show how maximum transmission of north light is accomplished and how hot summer sun is rejected and low winter rays accepted. Schools faced with a construction-lighting problem will find this a valuable, thought-provoking aid.

For a free copy, circle number 793 on the Reader Service Card.

Good vision vital to good learning



Bausch & Lomb

SCHOOL VISION TESTER

Speeds your visual health program

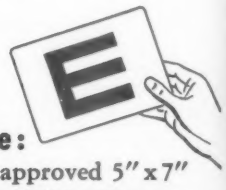
Good vision is vital to scholastic achievement. The Bausch & Lomb School Vision Tester provides fast, reliable measurement of visual performance—identifies the 4 out of 10 pupils in need of visual attention—makes possible a complete, streamlined visual health program.

Compact, easily portable, the instrument requires only 2 x 2 feet of space on a small table near an electrical outlet.

Complete range of professionally approved Massachusetts type tests administered by one person in 2 minutes. No previous experience required. Write for illustrated brochure H-629: Bausch & Lomb Optical Co., Dept. V-4, Rochester 2, N. Y.

FREE!

Included with brochure:



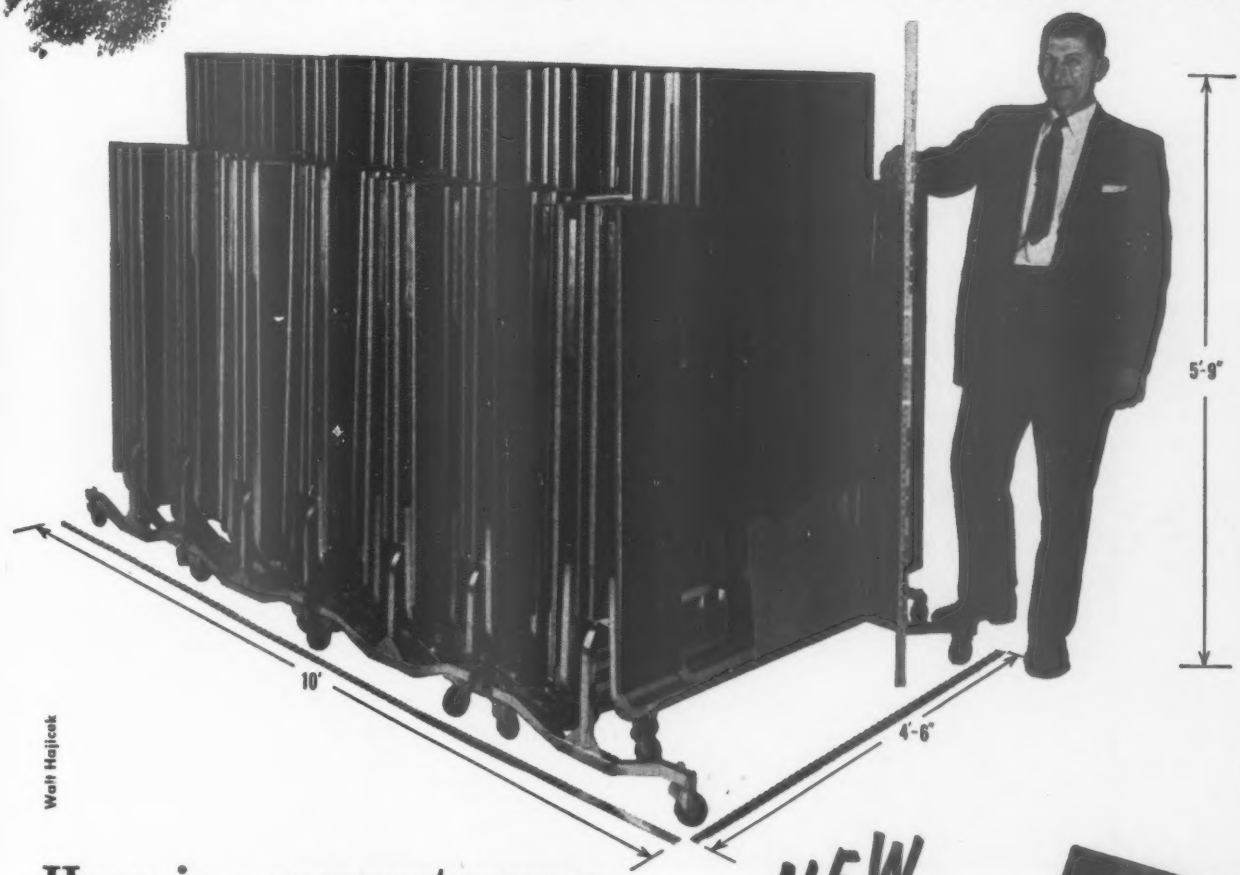
Professionally approved 5" x 7" plastic Classroom Vision Demonstrator for school nurse teachers.

BAUSCH & LOMB

SINCE B&L 1853

(For more information, see last page)

Only with Erickson portables can you store so many tables in so small an area!



Here, in a compact corner, is SEATING for EATING for 240 students

Let Erickson help you get *efficient* multiple use of space.

In today's schools, with every foot of floor space at a premium, portable lunchtables with benches have a big job to do when in use. When not in use they have to be out of the way.

Erickson portables nest *snug* . . . table against table against table . . . using only the minimum of your valuable storage area.

Photo shows how 10 full sized Erickson (Model 1429-B) portables fold and nest in an area only 4½′ by 10′ . . . seating-for-eating for 240 students!

Minimum storage is just one of the many exclusive features Erickson portables offer you in solving the seating-for-eating problem.

Send coupon for new 20-page booklet

Erickson PORTABLE FOLD-A-WAY PRODUCTS

NEW HELP!

Just off the presses. Colorful 20 page booklet to help you solve the seating-for-eating problem in your schools.

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Midway 5-6465

Gentlemen: Please send my free copy of your new 20-page booklet on solving the seating-for-eating problem.

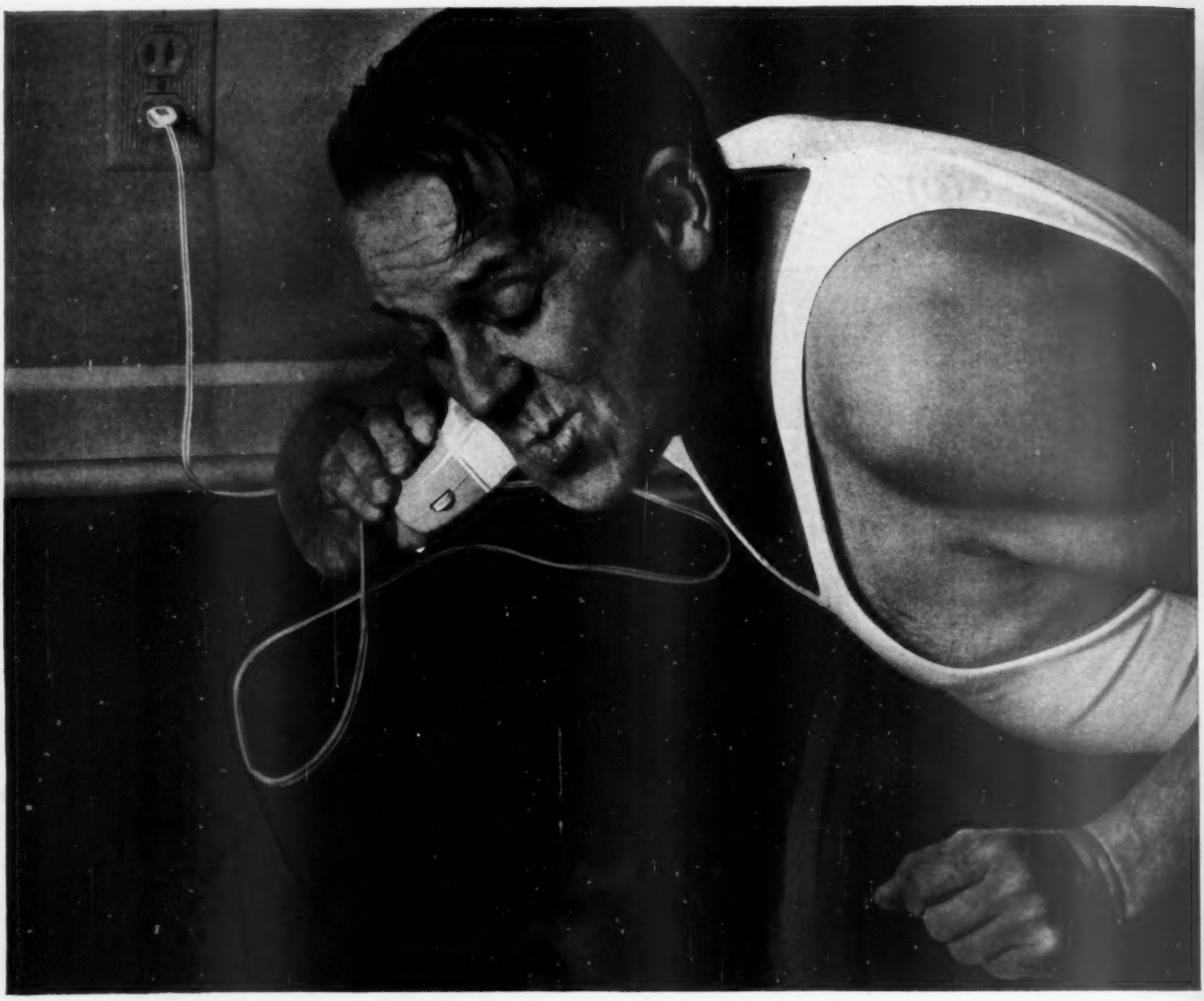
NAME_____ TITLE_____

SCHOOL_____

ADDRESS_____

CITY_____ STATE_____

(For more information, see last page)



It's easy to have beautiful floors... and still shave maintenance costs!

Here's how it's done . . . Clean floors with FLOATS-OFF, the concentrated synthetic detergent—its special cleaning booster makes dirt vanish in record time. Then, rinse. Let floor dry and apply WATER-PROOF WAX—it cuts waxing costs in half! Keep floor clean, dusted and polished (all at one time) with Holcomb's DUSTLESS SWEEPER.

With this three-step program we guarantee you'll find that floor care costs are the lowest possible . . . beauty the greatest . . . protection the longest lasting . . . maintenance the easiest.

Prove it on your own floors! Ask your Holcombman about the Introductory Floor Maintenance Package—a combination kit of four key floor care items that give beautiful floors at the lowest possible cost. And it's yours at a special introductory offer.

HOLCOMB SCIENTIFIC CLEANING MATERIALS

J. I. HOLCOMB MFG. CO., INC. · 1601 BARTH AVENUE · INDIANAPOLIS, INDIANA
Hackensack · Dallas · Los Angeles · Toronto

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NEWS OF THE SCHOOLS

A digest of current happenings in public education

New Jersey schools lose on budgets

A record number of school budgets were defeated in New Jersey's February elections and had to be resubmitted to the electorate. Altogether 48 school districts, out of the state's 498, saw all or part of their budgets go down to defeat. This is more than double the number rejecting budgets in 1956.

Among those districts that passed their budgets, was Tenafly, where citizen action, in the form of plays, meetings and publicity (*SM, Nov.-Dec.*) resulted in an overwhelming victory.

The Tenafly budget, which lost twice in 1957, was *increased* this year to compensate for money lacking the year before. Even so, it carried by better than six to one. Says Superintendent Burt Johnson, "We got out and we worked as hard as we could for a year. Our voters knew what the problem was this time and they came through."

Teacher recruiting Ohio outdoor objective

Business is ready and willing to cooperate with schools. Just one instance of business aid to educators is the current outdoor advertising campaign sponsored by the Ohio Outdoor Advertising Association. Almost 500 outdoor posters are helping recruit the 8,500 to 10,000 additional teachers needed in Ohio this year.

Members of the OOAA are donating poster space and labor worth over $20,000. The Ohio Education Association is furnishing the poster sheets with red reflecting letters that say "Teaching, a better career every year." It will also handle all inquiries resulting from the concentrated campaign.

Besides Ohio, six other states—New Jersey, New York, Maryland, Connecticut, Illinois and Colorado—will benefit from company sponsored outdoor advertising for teacher enlistment in 1958. The Ohio outdoor drive represents the largest yet undertaken with 39 firms contributing time and space.

Students get firsthand Knowledge of careers

Choosing a career more or less blindly can pose a big problem to students. In Burlington, Vt., the YWCA worked with high school officials to formulate a program to familiarize students with possible vocational fields. They came up with the idea of a series of guided tours through local plants and organizations.

Now young people at Burlington have a chance to find out firsthand what their future professions may be. On these tours students actually talk with people at work in various jobs they might seek. They learn all about the qualifications, training requirements and cost in time and money to prepare for a specific profession.

One group interested in library science was guided through the Billings Library at the University of Vermont. Another group, with a leaning toward nursing, met at the De Goesbriand

Too good to miss . . .

Burlington, Vt. . . . Mayor C. Douglas Cairns has proposed that Vermont set up a special high school for the state's brightest students. The mayor suggested that statewide examinations be held to find the expected 5% who would be eligible to attend.

"Vermont must do something about its talented youngsters," the mayor commented. Cairns suggested that a special high school would not only help the bright youngsters, by giving them a challenging education and a better chance to get into colleges of their choice, but it would also help boost the educational level of all the state's schools. "Local schools," he pointed out, would "work harder to help prepare their students to qualify for this state high school."

Washington, D. C. . . . Secretary of the Treasury Robert B. Anderson, in testimony before a House committee, indicated that he might support a proposal to allow teachers to deduct costs of furthering their education from taxable income. The secretary said some 30 or 40 proposals on teacher taxes were under study by his department. ". . . the need for increasingly more able teachers," he said, ". . . quite appropriately may require some modification of our tax structure.

San Francisco . . . The American Legion's long-standing opposition to teaching about communism in the publice schools has ended. At a Legion-schoolmaster conference in this city last month, the organization's executive board explained its new policy which calls upon members to work with local and state school officials to provide "suitable courses designed to deepen the understanding of American democratic ideals and to expose the fallacies of communism."

Evadale, Tex. . . . The future of this independent school district is in doubt because of the refusal of the East Texas Pulp and Paper Mill to pay its 1957 school tax. The bill comes to almost $120,000.

The Evadale district until this year operated just nine grades. Addition of three more necessitated doubling tax valuations in the area. The district's total budget for the year is $146,000 of which the mill pays 94%.

Spokesmen for the mill stated their willingness to bear their share of the costs but complained of "excessive and oppressive taxes." The mill was established in Evadale in 1955, paying $35,000 in taxes. The next year the bill was $57,000. The mill has offered to pay $57,400 this year.

Memorial Hospital to learn about physical therapy. As a result, some of these students are already gaining career experience by doing volunteer nursing work.

Language learned in lower grades

A novel experiment in foreign language teaching in the lower grades sponsored by the PTA has proved a success at the Fairlawn School, Akron, Ohio.

The PTA made arrangements with the board of education to teach French in the elementary school, hired a teacher approved by the Modern Language Association, and obtained consent of 87% of the parents who contribute $8 a child per school year.

When the plan was first launched last September, all but three of the 650 pupils in the first six grades started taking French. Now all are learning French with enthusiasm and ease.

The program provides 15-minute classes three times weekly for first and second graders and 20-minute sessions three times weekly for grades three through six.

The teacher selected to handle all classes, Miss Elinor Coraretti, is French born. Every pupil is now learning conversational rather than school-book French by hearing and speaking it. As one second-grader commented quite naturally, "C'est bon."

Retailing students operate store

Sales were brisk at the department store opened by students of the Uniondale, N. Y. high school. The one-week project provided pupils with actual experience in retail organization, operation, selling, advertising, display and customer relations. The Long Island youngsters borrowed a store for their project.

The Uniondale Kiwanis Club and local merchants cooperated in the venture. Merchandise was supplied on consignment, with a percentage of the profits going to the retailing class.

The store featured 11 departments ranging from children's clothing and toys to floor covering and television.

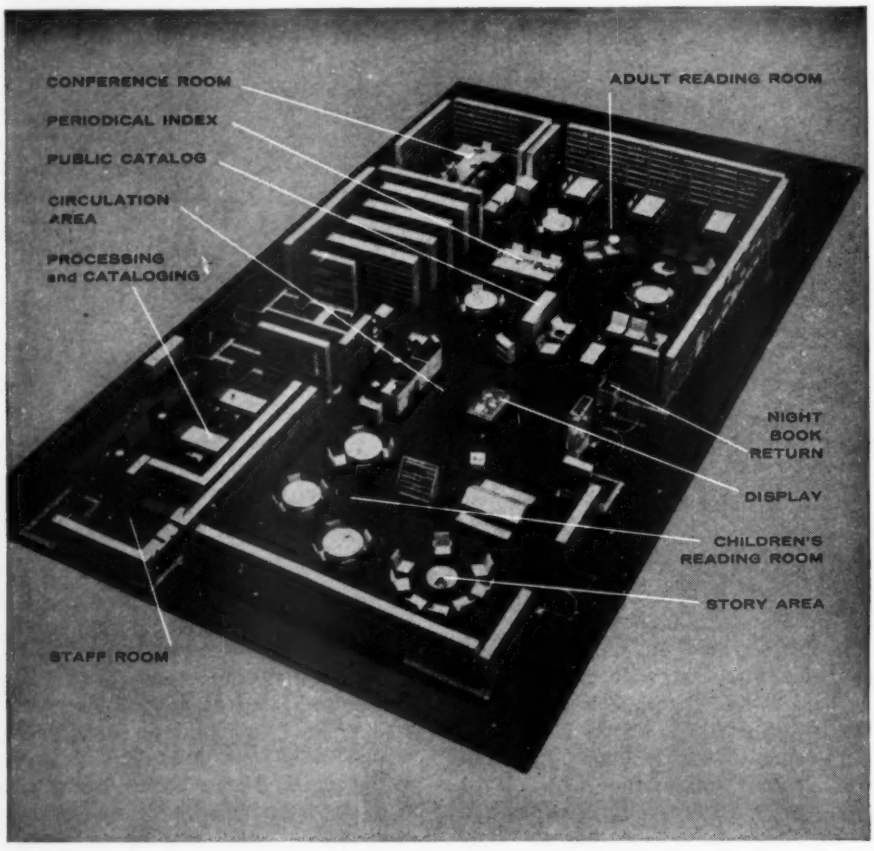
Fall River man helps gifted students

A one-man campaign to send at least 15 gifted high school students from the Fall River, Mass., area to college every year, has been undertaken by Dr. Irving A. Fradkin, a local optometrist.

Dr. Fradkin conceived the idea because he had been dismayed at the number of his high school-age patients who said they were quitting school because they lacked funds to continue.

In collaboration with Daniel J. McCarthy, Fall River representative of the International Ladies Garment Workers Union, Dr. Fradkin formed the Citizens Scholarship Fund of Greater Fall River. Annual membership in the organization is $1 which is used for scholarships. Letters were sent to all parts of the country asking for contributions.

The organization has already collected more than $1,000, along with an endorsement from President Eisenhower. The President called the campaign "a splendid example of the kind of increased local concern for education needed in communities throughout the nation."



ALL THIS PICTURE NEEDS IS YOU

... at the circulation center of this warm, friendly and remarkably efficient "New Life" Library. Take this opportunity to look around. Anything missing? Well, let's see. Records at finger-tips... staff room nearby... conference room out of heavy traffic... layout just right. No questions or comments? Then whisk it away—to your "New Life" distributor (who can make "dream libraries"—like this—come true).

SJÖSTRÖM OF PHILADELPHIA

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New Life LIBRARY FURNITURE

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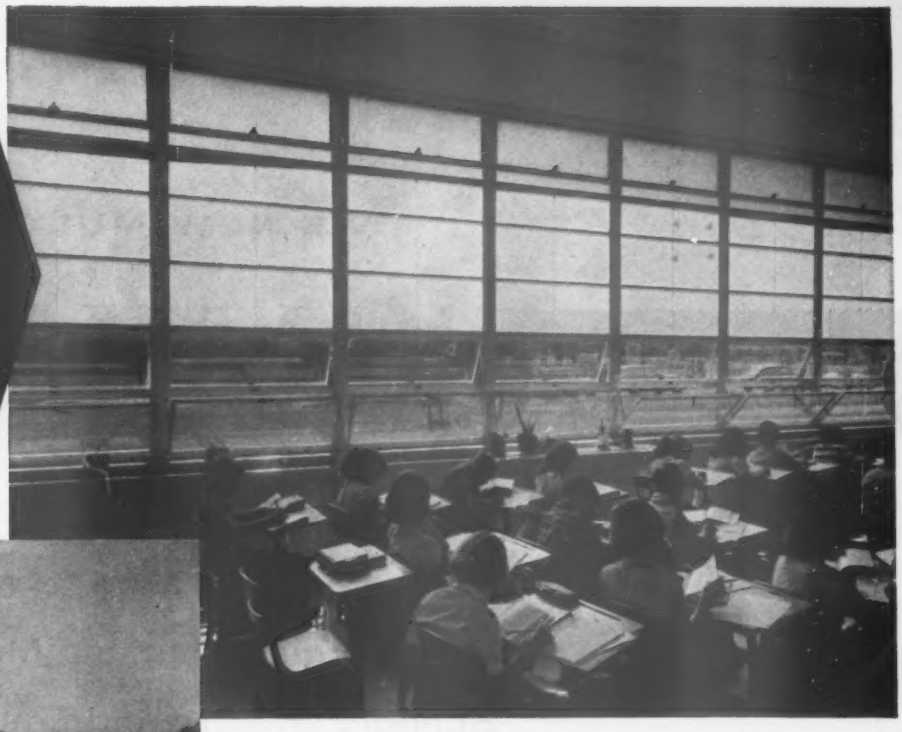
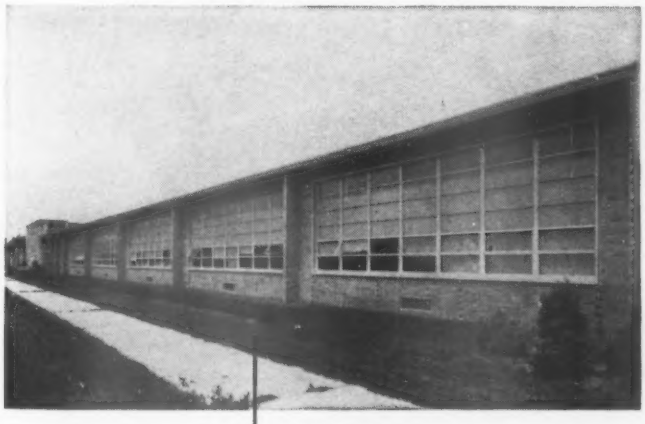
PENTECOR ...PICK of the PAIR



Thalia Elementary School, Norfolk, Virginia

Northside Elementary School, Norfolk, Virginia



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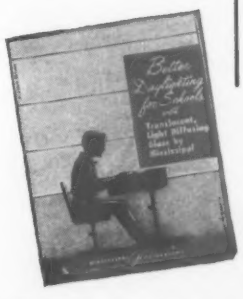

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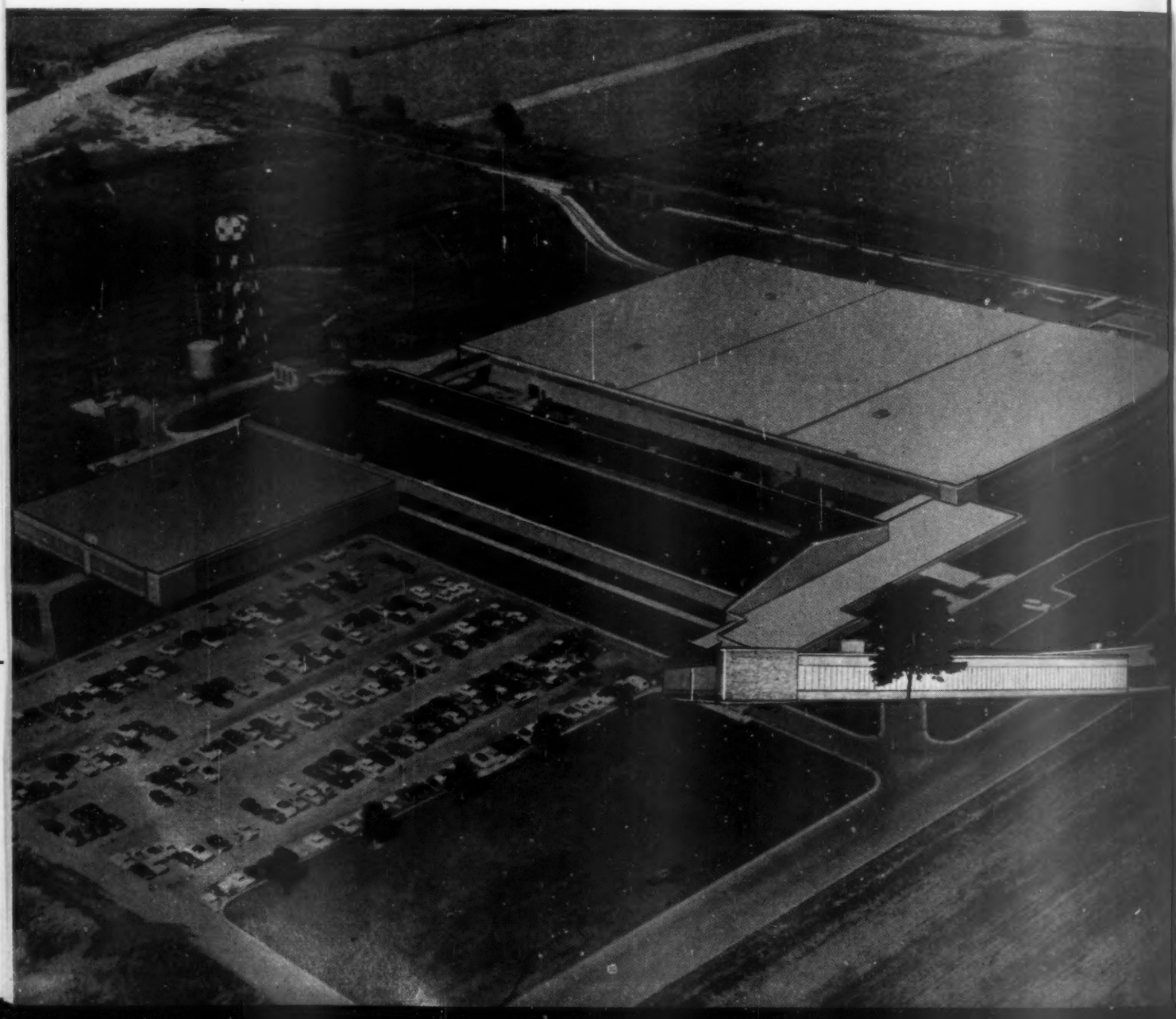

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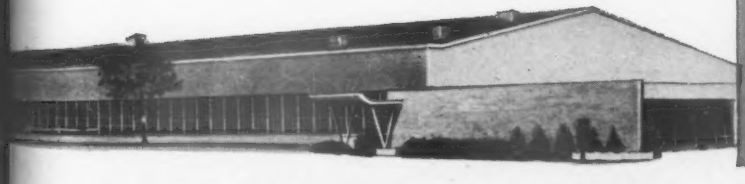

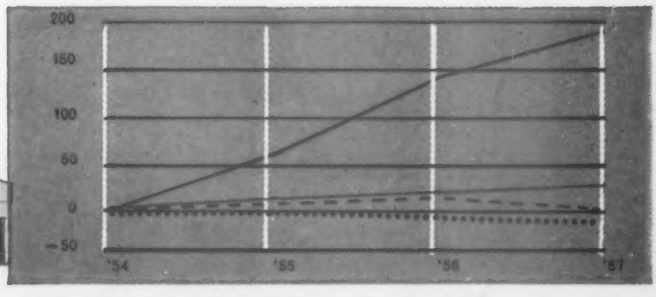

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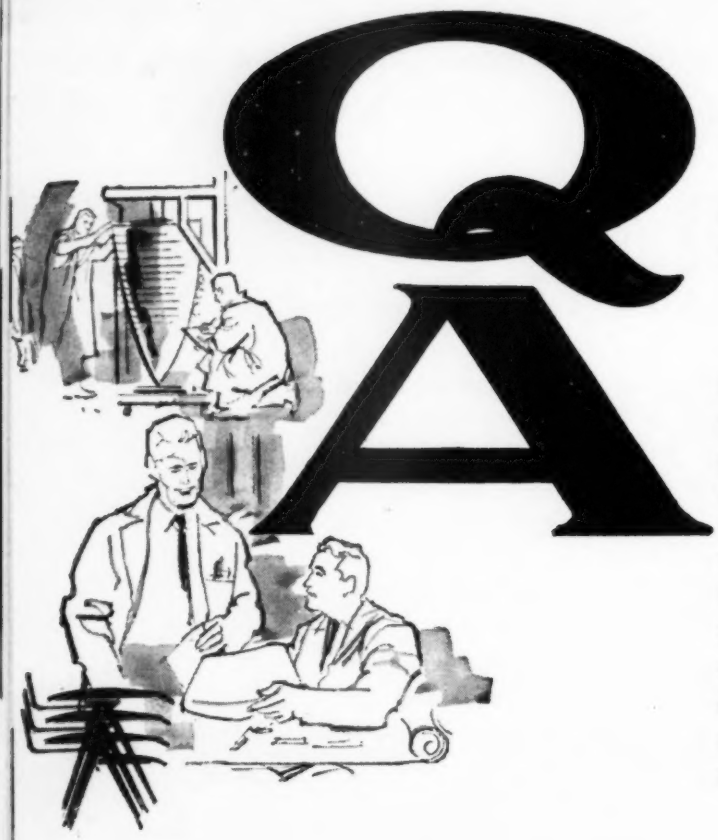

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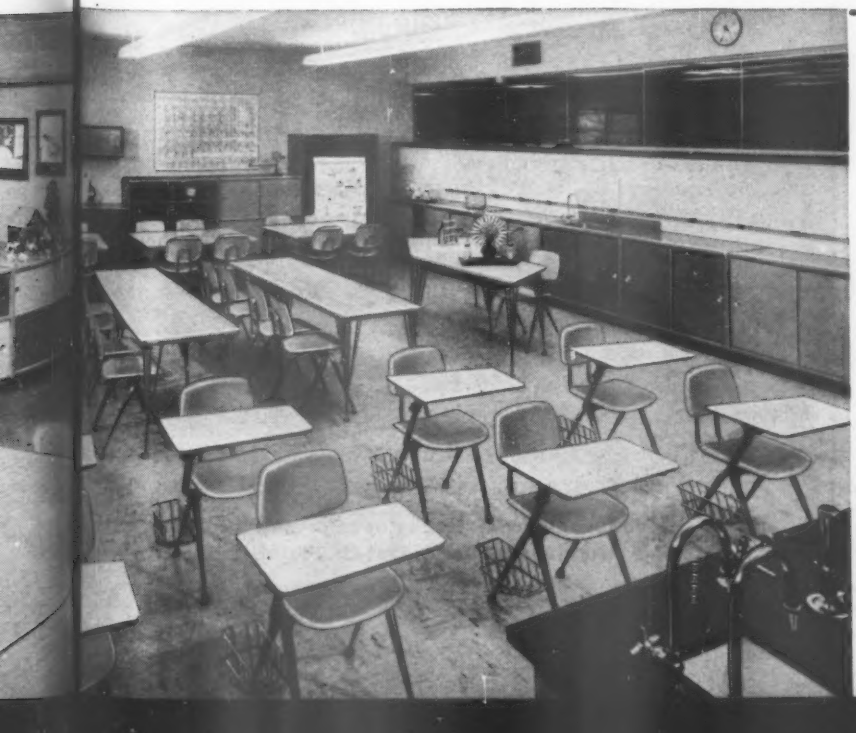

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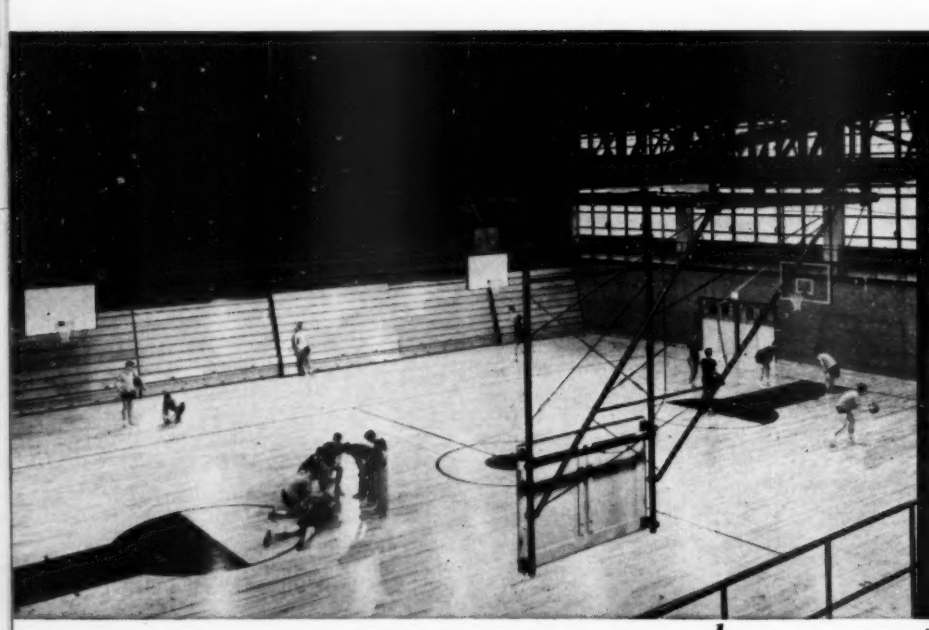

New Loyola Academy Gymnasium in Wilmette, Illinois demonstrates flexibility of Brunswick Folding Backstops. Note placement of Brunswick folding gym seats along side courts. Father J. Peter Buschmann, President; Naess & Murphy architects.

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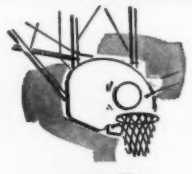

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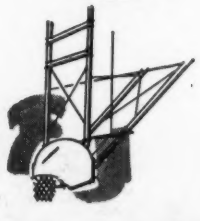

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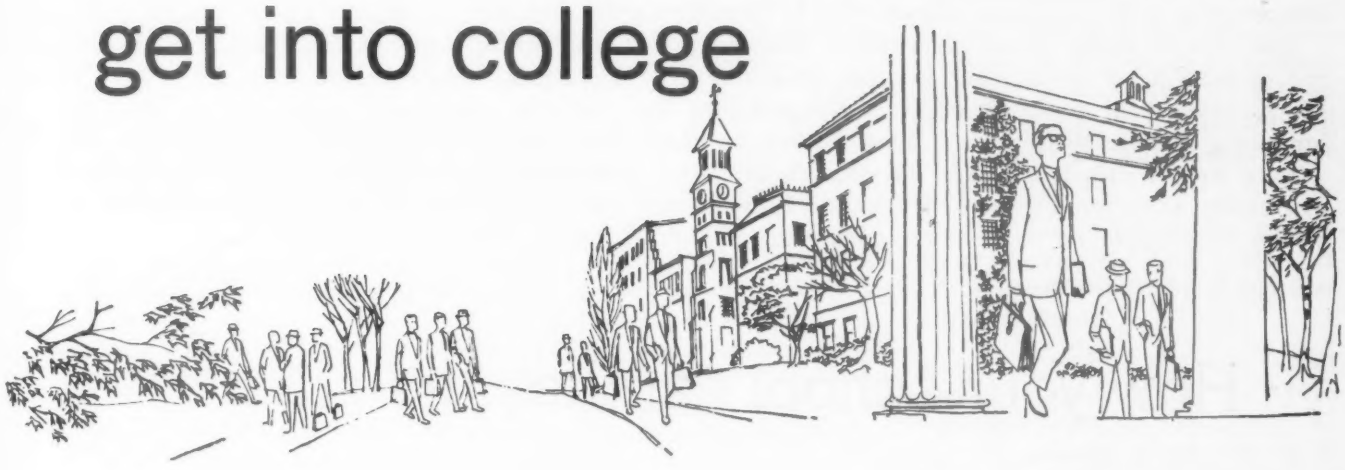


In this tape-recorded interview, a high school administrator outlines a program he has found successful in helping the children of his school get into the colleges of their choice

■ ■ ■ Competition for admission to overcrowded colleges is no longer confined to the student. The high school from which he is graduating is also in the race. Deluged by more applicants than they could ever hope to house, let alone educate, colleges and universities are beginning to appraise the quality of education offered by the preparatory school. Many secondary schools entered the competition long before the colleges forced it upon them. They did it to help their graduates get into colleges which were turning away as many as four out of every five applicants.

This disheartening ratio, reported by Dr. Benjamin Fine, former education editor of the *New York Times* in his book, "How to be Accepted by the College of Your Choice" points up the fact that competition will continue to be the keynote for college admission for a good many years. And the competition may grow increasingly severe.

The US Department of Education, standing on an impressive record of statistical accuracy, predicts that within the next 12 years, when the World War II bumper baby crop reaches college age the number of college applicants will have doubled. Potential of existing colleges and universities to expand in proportion is doubtful. Further, many of them are resisting the already considerable pressure on the ground that they would be spreading their educational resources much too thin. But all this is only part of the story.

College enrollment in 1957 reached an all-time high, for the sixth consecutive year. It was slightly more than 3 million. In these six record-breaking years, while college enrollment increased by 45%, the country's college-age population grew by only 2%.

The fact is, that while there are not so many more children, more of them are going to college than ever before.

Confronted with this unprecedented demand, colleges and universities have resorted to an almost infinite variety of screening techniques to help select the most able and promising students. Many of these factors are well beyond the control of the student. Besides putting the applicant's preparatory school under examination, colleges also review such factors as social, cultural and geographic background. They seek variety to help create a student body of what they term "universal character." State universities, however, which hold more than half the nation's entire college population, cannot reach so far for universality. Many of them are required to give acceptance priority to students from their own state.

The role of the college alumnus, popularly believed to be one of exerting influence to push a borderline

student onto the campus, has changed. Colleges now expect their alumni to find outstanding students, not promote doubtful ones.

Private preparatory schools, whose graduates once had virtual assurance of college admission, now are competing as hard as anybody else at least in theory.

The ratio of public school graduates to private in college today is on the increase. It ranges from 40% of the student body at Yale, to 80% at Columbia, an indication that everybody has an equal chance.

Even lack of cash is no longer an effective barrier to a college education. Of nearly $60 million in scholarships and student aid funds offered each year, more than 10% of it goes unwanted. A student whose only handicap is money can surmount this easily if he makes the effort to apply for it. In addition, employment opportunities on most campuses are numerous.

The problem, really, is whether the college applicant and his preparatory school are able to meet the rising standards our over-crowded colleges have been required to adopt.

In this tape-recorded interview, one secondary school administrator, acutely aware of the problem, tells what his schools have done, and what he believes other schools can do, to help their graduates get into college.

How your school can help its graduates

Q. Most high school seniors recognize that they must have a top record to get in one of the more select colleges. But, from what one hears from college admission officers, there is another factor, too. The applicant's high school, itself, is on examination. For example, take the statement by Mary E. Chase, director of admissions at Wellesley. She said recently, "Increased selectivity on the part of the colleges is beginning to include an appraisal of the quality of education offered by the applicant's high school." Is this something new, Dr. Moyer? Are you conscious of it?

MOYER: I don't think it is anything new—we have known of this for some time. Some colleges rate the success of previous graduates of a particular high school. They use this information in evaluating new applicants from the same school.

Q. Let's say that two applicants were seeking admission to one of these colleges. Let's assume that one came from a school with an excellent reputation, the other from an unknown school. You believe the first child would be given preference?

MOYER: All other things being equal, I would think that the college would give more attention to the student from the high school they knew something about. Sometimes it isn't merely a matter of "excellent reputation"—it's just a matter of knowing something generally favorable about the high school.

Q. That sounds like a terribly limiting factor for a student who hasn't been preceded in the college of his choice by other graduates of his high school. What can a high school do to improve the prospects of its graduates in that situation?

MOYER: It is a limiting factor, but I think there are several things that schools can, and should, do to help its graduates get into any college. The first one would be to make certain that they are offering as good an educational program as they possibly can. I think that a strong guidance department is also extremely important—colleges watch for that. And I think something you might call "good public relations" can also be built between colleges and high schools.

Q. You mention a good educational program, but aren't all schools trying to put on the best educational program they possibly can?

MOYER: Yes, I think they are trying, but I think there are many different ways of doing this. There are many philosophies so far as administrators are concerned. You have to think of the ability level of the students in your high school, and the number of students who are anticipating college. I think you have to consider the factor of grouping, as well as additional offerings to the students.

Q. Let's take that apart. If most of your graduates are going on to college, it should be rather easy to build a college entrance program. But let's say you have a 50-50 ratio, say only half of your kids are going to college. What can you do for the college entrance half that is going to improve their chances?

MOYER: Well, here I believe that you have to plan some type of special grouping for them . . . give them something over and above the

A high school must offer as good an educational program as it possibly can

in evaluating new applicants from the same school."

standard program such as the regents program in New York state.

Q. Specifically, can you point out one or two examples of what you may have done in the past in the high schools and district schools with which you have been associated?

MOYER: Well, in one situation we carried on an accelerated program in science work. We offered general science to the seventh and eighth grades on an everyday basis, allowing the students to go into biology in the ninth grade instead of into general science.

Q. You think that might be extremely valuable, then, on a transcript when it goes into a college?

MOYER: I'm sure it helps. An even better example is a "Great Ideas" seminar that we offered for carefully selected students in their senior year. The high school senior got into the seminar based on his ability first, secondly on his achievement in the past and his interest in academic work. This was a wonderful educational experience for the boy, and it also helped him in getting into college. When we sent in his transcript to a college, we also sent an explanation of the entire program.

Q. Why would a college consider this course important in its selection process?

MOYER: I would think that it would mean they knew the student was ready to handle college level—even advanced college level—work. When competition is keen, these little things aren't so little. They can make the whole difference.

Q. If you will assume that a college only admits pretty bright kids, are they looking at these courses as a way to prevent the number of dropouts or failures in the freshman year, or are they looking for kids who can go into advanced work immediately in their freshman year of college?

MOYER: I would imagine that they would be interested in both, although I would think that the primary thing would be to get students able to handle the advanced work that colleges are geared to offer.

Q. Mr. Moyer, you listed a "good guidance program" as the second important thing that you feel a high school can do to improve the opportunity for its children to get into colleges of their choice. Aren't guidance programs pretty conventional in high schools these days?

MOYER: Yes, but there are varying types of guidance programs. Guidance is a comparatively new field in education. Until recently, most everyone felt that—and I'm speaking of the college entrance phase of guidance programs—most everyone felt that it was their responsibility to get students to *go* to college. But, more and more, colleges are working with high school guidance departments on this admission problem.

Q. Specifically, then, when you are speaking of a high school guidance department, you're not thinking in terms of vocational guidance or anything of that type, you are thinking of help in selecting the right college. Is that correct?

MOYER: It is correct except, of course, that guidance departments handle the vocational programs, too. What I'm referring to primarily is the selection of colleges. However, a considerable amount of guidance work has to be done previous to this by other counselors. The student needs help early in high school. You have to know what the student has in mind for an occupation to know what type of college to prepare him for and to recommend for him.

Q. This is a fuzzy area, and guidance departments might mean different things to different people. Let's take Briarcliff, N. Y., where you worked for ten years. What were some of the specifics of your guidance program there?

MOYER: Our guidance department grew, in 10 years, from a teacher who handed out catalogs to students, to a full-time guidance person. The last two or three years, our guidance work was pointed primarily to admission to colleges, because such a large percentage of our students were going on to college.

Q. How many children actually applied for college entrance?

MOYER: About 80% of the graduating class.

Q. About how many of those kids would you say got into a college of their first choice?

MOYER: Well, practically all of them got into their first choice college. But this was a result of helping them with their plans and helping them choose what college they wanted to attend.

Q. You mean you really control what becomes the "first choice" of the student, simply by giving him expert guidance?

MOYER: We tried to help the parent and the student decide on where he might succeed. Of course, we had no authority nor did we try to force a student to make application in only one place. If, after we had talked to the student, he still wanted to apply to any other given college —he certainly had the right to do so.

Q. Dr. Moyer, what do you do about a student who has his heart set on a certain college, but hasn't a chance to qualify? Let's say his father went to Harvard. That's the school he wants to go to, and it is very important to his family, too. What do you do in a case like that?

MOYER: I'm glad you asked that. First, let's assume that this child is just an average student. It seems to me that there ought to be two considerations: one, what's his chance of getting into Harvard and, second, is Harvard the right school for him? Going back to the first part of this, in 1955 I made a survey of 20 New England schools to find out what chance our students had of getting into these schools. It's quite detailed. You'd have to read it. I don't think I could quote it all here. I finally came up with a prognosis of the chances for one of our students getting into Amherst or Wellesley.

Q. Could we have a copy?

MOYER: Yes. (Ed: see boxes on following pages for a summary of this report.)

Q. You said that the first consideration in dealing with the child or his parents was his chance of getting

"We discuss with the parent whether or not this

So you want your boy to go to Amherst

The chances of a better-than-average high school boy graduate being admitted to Amherst College can be predicted with something approaching reasonable accuracy. At least, so says Edward Moyer, former principal of the Briarcliff Manor, N. Y., public schools.

Moyer made a statistical study of the question as applied to a boy named John who was in the top 10% of his class at Briarcliff. (See opposite page for study of a girl's chances of being enrolled in Wellesley.)

Since John wanted to go to Amherst, Moyer felt the boy and his parents should have a realistic appraisal of the chances for acceptance. He told them the best basis for prediction seemed to be figures provided by Amherst itself on the makeup of its previous year's class.

First of all, John would be one of 1400 boys seeking only 253 vacancies in the freshman class. Therefore he has an 18% chance of success. The previous year, 142 of the freshmen (56%) were from public schools. This cuts John's chances to 10%. Of that 142, only 63 come from New York state. John's chances are now down to 4½%. Fifteen percent of the class are sons of alumni. John is not. His chances slide to 4% and he hasn't yet even filed an application.

What happens after his high school record and his scores on mathematical and verbal aptitude tests are considered? If he scores high on the tests and is in the top quarter of his graduating class which he is (and so are 75% of new Amherst students), then John will be competing with all other New York high school graduates of equal ability and qualification for only 23 vacancies. His chances of being accepted are about 2%.

Says Moyer: "Colleges complain about the problem of multiple applications. But for a high school guidance department to advise a boy to make a single application to a college where he has but a 2% chance of being accepted is questionable.

"Few individuals or businesses would invest sums of money in a proposition that had but a 2% chance of succeeding."

admitted. What was the second point?

MOYER: The second point would be to discuss with the parent whether or not this particular college is the *right* one for the child. This involves whether the boy is the type of boy who might fit that type of atmosphere, whether it is a large school and he is coming from a small school, whether he has been a leader—many things like that. The socio-economic background of the student body would be a factor.

Q. Then you are saying, Dr. Moyer, that there is a right school for every child, is that correct?

MOYER: I'm sure there is a right school for every child who is fit to go to college, and I think that a great deal of time and information-seeking should go into the selection of the right college.

Q. Do you think it is possible that a child might miss an opportunity to get into the school that his parents want him to go to, simply because you steer him away from it?

MOYER: I don't think that we are steering him.

Q. How do you sell the parents if they are strongly predisposed to send their child to a certain school? Isn't it pretty hard to eradicate that pre-conceived idea?

MOYER: This is difficult, but if the father is an active business man, it isn't too hard to convince him that it's a poor risk if his son would probably have only a 2% chance to get into that college.

Q. When does your guidance work begin for the average student in high school? Does it begin in his freshman year, so far as college entrance is concerned, or do you wait until later for that?

MOYER: This depends a great deal on the adequacy of the staff. In Briarcliff, with only one guidance counselor, we found it very difficult to reach down below the sophomore or junior year. In our present program in West Hempstead we have counselors who are working from the seventh grade on up.

Q. When you say they are working

particular college is the right one for the child."

—what do they do, for example, in the seventh grade so far as college entrance is concerned?

MOYER: Here they are trying to get programs scheduled for the student related to what their future high school curriculum might look like. They are working with both parents and students, trying to discover the child's interests. As it moves on it becomes much more complex.

Q. How much confidence can you have in a child's early ideas about what he thinks he wants to do?

MOYER: I believe that all students ought to have some sort of direction and perhaps the direction at that point may be only signs. If they are interested in certain things they ought to be provided with the material to develop and stimulate their interest. Certainly, students do change their minds as they grow older. We want them to . . .

Q. There's more to guidance than getting into college, but sticking to just that aspect, when a college admissions officer knows there is a good guidance program in the high school, why does that necessarily favorably incline him to a student from that high school?

MOYER: First, I believe that he feels that the student is pretty well informed about the college that he is choosing, and that he is considered to be a good candidate by the guidance people. He respects these people if he knows they are competent.

Q. Do admissions officers of colleges actually come into a high school and have contact with the guidance department?

MOYER: Yes. It is a very important part of their program. They do a great deal of calling at schools and talking to guidance departments. They also have interviews with students. Of course, we, too, want our students to make visits, preferably during their junior year, to the colleges that they are considering.

Q. Does your guidance department set up an appointment for the child who wants to visit a college?

MOYER: Yes. We feel this is the

continued on page 74

So you want your girl to go to Wellesley

The likelihood of a high school graduate being able to enroll in a given college has been reduced to statistics in a survey made by Edward Moyer, recently appointed assistant superintendent of the West Hempstead, Long Island, N. Y. school system. Dr. Moyer made the study while serving as supervising principal of the Briarcliff Manor public schools in New York's Westchester County. Here, Moyer weighs the chances of a Briarcliff girl being admitted to Wellesley. (On the opposite page, the same survey is applied to a Briarcliff boy who wants to go to Amherst.)

In this case, the study is based on the familiar Verbal Aptitude Test which most colleges require as a condition of entrance. Fifteen girls took the test. Mr. Moyer chose the one with the highest score. This put her on a par with 22% of Wellesley's entering class of 480, or one of 106 students of equal ability.

But only 46% of Wellesley students come from public schools, so the Briarcliff girl is seeking one of only 49 vacancies (46% of the 106 students of equal rating on the test).

In Wellesley's entering class the year this estimate was made, 39% of the students came from the Middle Atlantic states. This means the Briarcliff girl is actually seeking one of 20 vacancies. Added to this is the fact that 15% of Wellesley freshmen are daughters or granddaughters of alumnae. This cuts the openings available to the girl to 17.

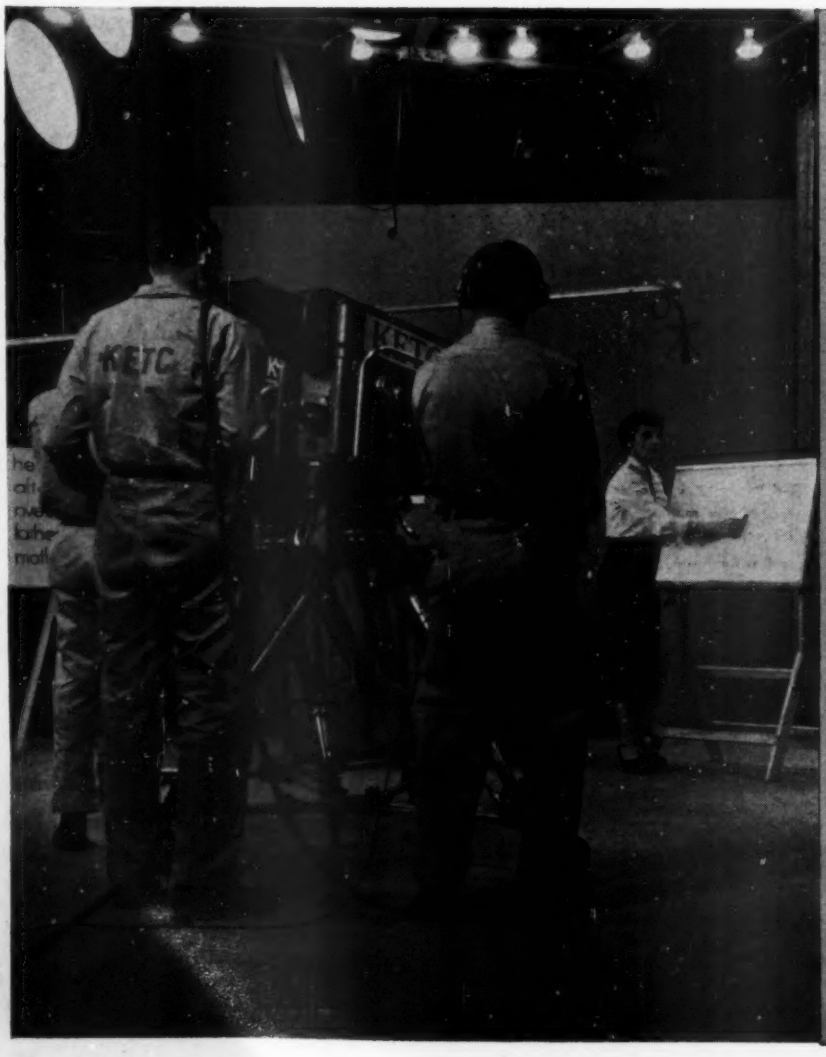
Theoretically, at least, this leaves her competing with all other non-alumnae daughters of similar qualifications from all the public high schools in five states—New York, New Jersey, Pennsylvania, Delaware and Maryland for 17 openings.

Her chances, all other factors being equal, are indeed slim.

Says Moyer: "It is this type of competition which faces even the brightest of our high school graduates seeking admission to college today. The end is not in sight because many established colleges are holding firmly to their present size even though they are faced with a swelling secondary school population that expects to be able to go to college. It is possible that the solution to this problem will come only through the rise to prominence of the many excellent smaller colleges throughout the country."

What your school can do with broadcast TV

Educational television, over commercial or non-commercial channels, is available to all schools. This article tells how schools are making use of this medium and how your schools can benefit from broadcast TV.



Key	City	Call letters	Channel
1	Seattle	KCTS	9
2	Corvallis, Ore.	KOAC-TV	7
3	San Francisco	KQED	9
4	Salt Lake City	KUED	7
5	Denver	KRMA-TV	6
6	Houston	KUHT	8
7	Oklahoma City	KETA-TV	13
8	Lincoln	KUON-TV	12
9	St. Louis	KETC	9
10	Minneapolis	KTCA-TV	2
11	Madison, Wis.	WHA-TV	21
12	Milwaukee	WMVS-TV	10
13	Chicago	WTTW	11
14	Urbana, Ill.	WILL-TV	12
15	Detroit	WTVS	56
16	East Lansing	WKAR-TV	60
17	Columbus, O.	WOSU-TV	34
18	Cincinnati	WCET	48
19	Pittsburgh	WQED	13
20	Boston	WGBH-TV	2
21	Philadelphia	WHYY-TV	35
22	Chapel Hill, N.C.	WUNC-TV	4
23	Miami	WTHS-TV	2
24	Atlanta	WETV	30
25	Birmingham	WBIQ	10
26	Andalusia, Ala.	WAIQ	2
27	Munford, Ala.	WTIQ	7
28	Memphis	WKNO-TV	10
29	New Orleans	WYES-TV	8
30	Monroe, La.	KLSE	13
31	San Juan, P.R.	WIPR-TV	6

Last month, School Management investigated the status, potentialities and problems of closed-circuit television. As was pointed out, closed-circuit is but one of the ways to use television as an educational tool. This month we look at the other two avenues, educational (or non-commercial) television and educational scheduling over commercial television stations. These are grouped under the heading "broadcast television."

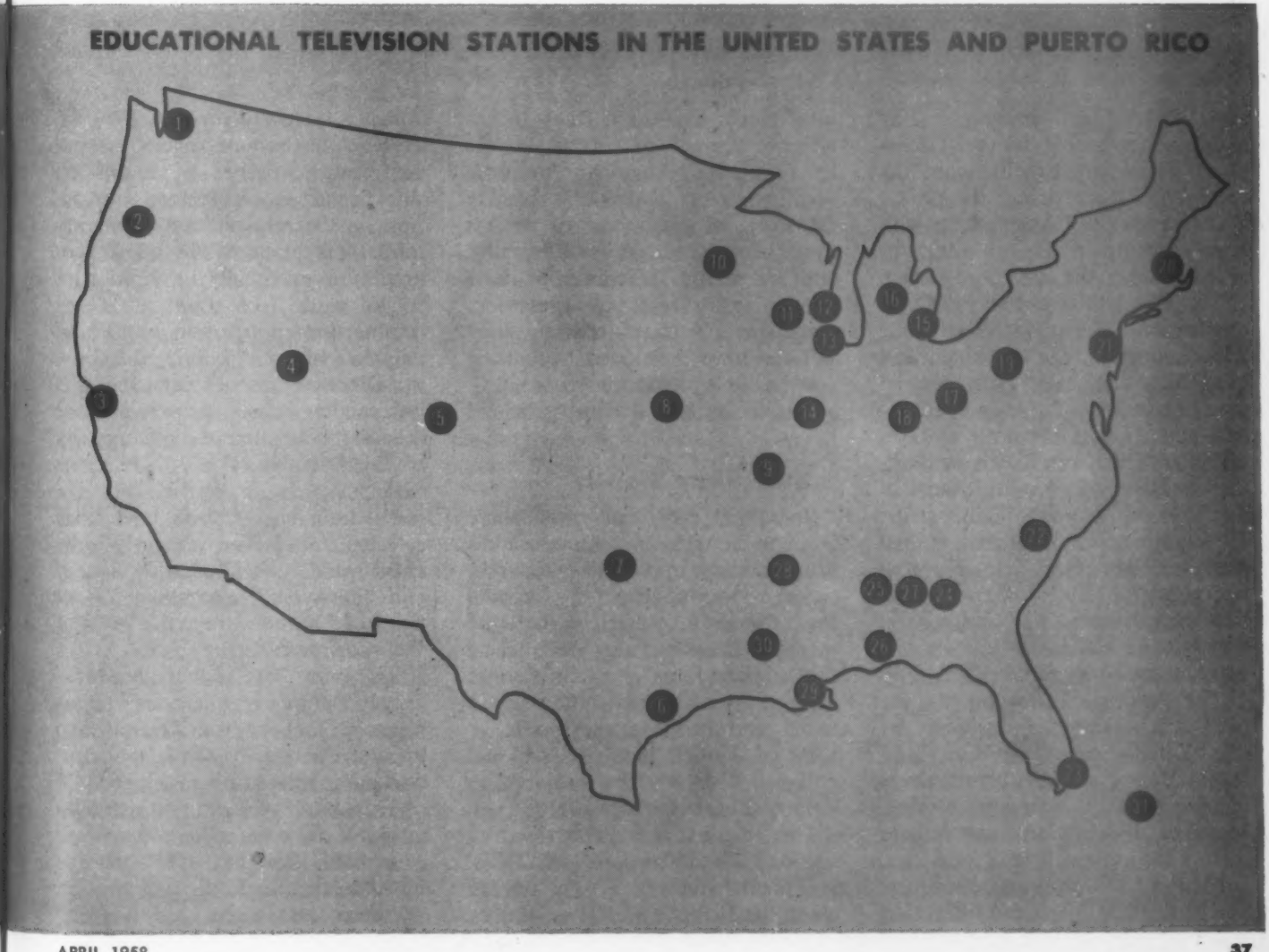
Most of the material presented in this article was compiled by William A. Harper, director of information services at the Educational Television and Radio Center, Ann Arbor, Mich. The ETRC develops and distributes educational television programs for a network of stations. Editor

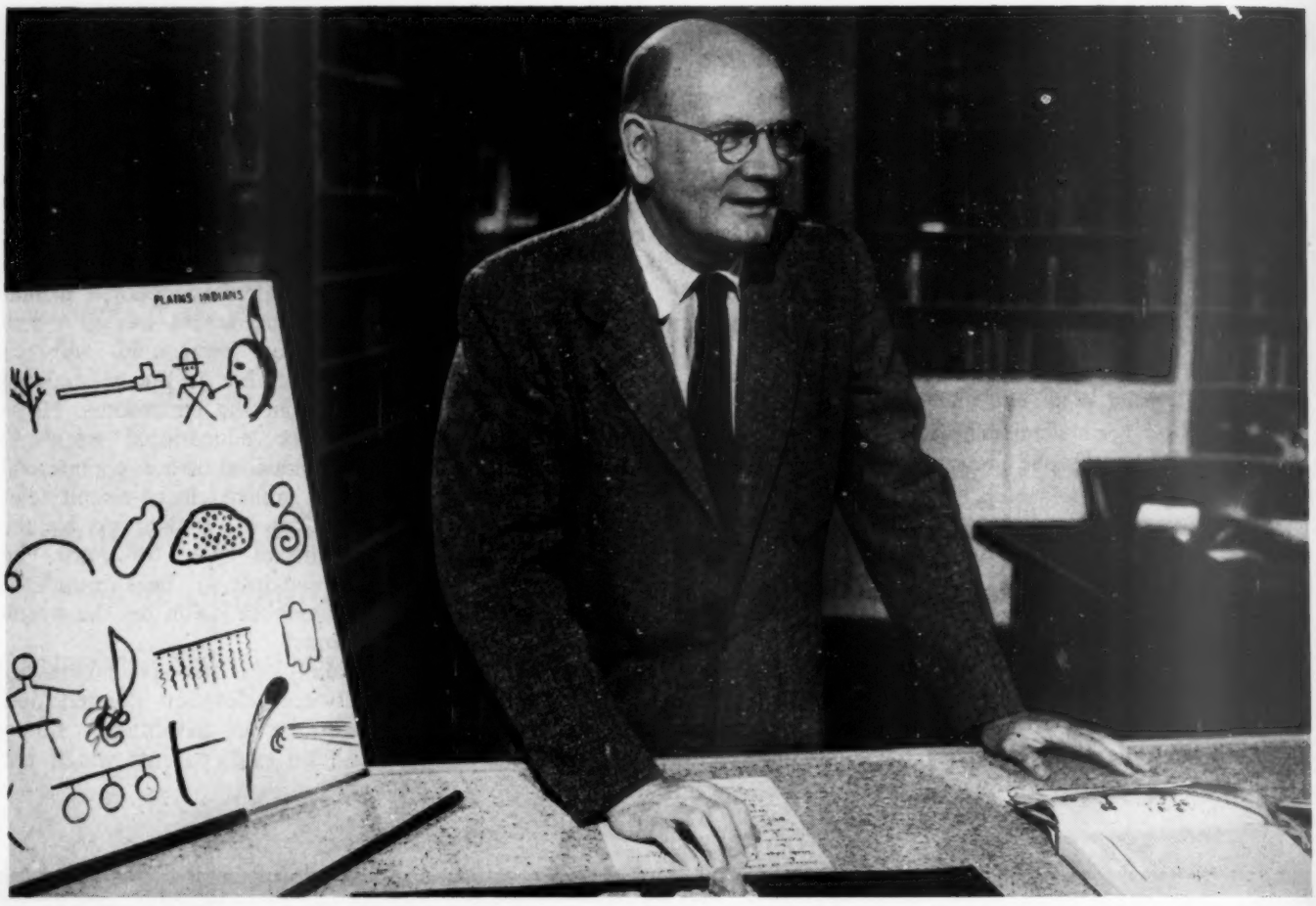
■ ■ ■ Educational television is an extremely broad concept. It can be taken to mean any program that adds to the knowledge of its viewers. Such telecasts as See It Now, Omnibus, Bold Journey and even dramatic presentations like Playhouse 90 and Shirley Temple's Storybook fall into this category. But the phrase can refer more specifically to programs whose major objective is education and educating rather than entertainment. These may be aimed at pre-school children, at various groups of adults or at children of school age.

In most cities where educational programs, in the latter sense, are being telecast over commercial or non-commercial outlets, the schools have taken an active role in planning and securing the material to be exhibited. These schools have accepted as their responsibility not only the children actually attending classes, but all members of the community.

This article is concerned primarily with the actual use to which schools have been able, and are going to be able, to put educational television in the classrooms. However, since educational television over commercial or non-commercial channels, unlike closed-circuit telecasting, can be picked up by the community-at-large, it must be viewed against a background of educational television for the whole community.

Actually, as one spokesman for educational television pointed out, this can be an advantage. "Many times," he said, parents watch the





Shakespearean authority Frank Baxter traces the history of books and printing on the ETV series "The Written Word."

same instructional programs their children are seeing in their classrooms. Knowing exactly what the teacher has been doing, the parent is in a better position to help with homework or to answer questions growing out of the classroom work."

Six years ago, the Federal Communications Commission set aside 258 channels in the very high and ultra high frequency ranges to be used exclusively by non-commercial educational television stations (ETV). Thirty-one such stations are operating today, with others in the planning or construction stage. Twenty-nine are members of the National Educational Television network (NET). All broadcast openly into their communities and can be tuned in on the home set just the same as any commercial channel.

The stations belonging to the NET are coordinated nationally by the Educational Television and Radio Center which offers them a regular weekly program service. Most of the stations supplement these programs with local offerings.

Many of the programs broadcast during daytime hours are integrated into regular classroom study to enrich the course work. Thus, a class in 12th-grade American literature might tune in the NET's weekly "Prospect of Literature" or a class in science might use "The Elements" with Dr. Glenn T. Seaborg to bring special authority to the classroom discussions. And, of course, many stations have developed, with their area schools, local classroom programs to be telecast during school hours.

Schools draw heavily

In almost every city where there is a non-commercial station, schools draw heavily upon them for material. Most important to a school executive, however, is the fact that many of these stations are offering direct instructional programs, either on an experimental or regular basis, and bringing the words of some of the best local and national authorities on various subjects, to large numbers of students.

One such example is provided by non-commercial station WHYY-TV in Philadelphia which went on the air in the Fall of 1957. The station, which is partially supported by the Philadelphia school system, is concentrating entirely at present on direct and supplementary instruction on the primary and secondary levels. (It plans to do adult programming eventually in addition to school work.) Programs are being produced in cooperation with Philadelphia's board of public education, the Diocesan schools, suburban and independent school districts and the school of education of the University of Pennsylvania.

To test the utility of this TV instruction, nine schools have been selected to receive regularly televised work in social studies, history and biology, but altogether 200 of the areas' schools are making use of the programs.

The point here is that an educational station is receiving major financial support from schools and in return is offering the schools important instructional assistance.

This kind of help is generally available in cities where there are educational stations. ETV stations in Alabama, St. Louis and Seattle, to name just three, are working

with schools in such endeavors. In New Orleans, station WYES-TV works closely with the schools which help support it by appropriating an annual budget of 50¢ per student for the station.

Of course, scheduling the telecasts to coincide with school programs is a major administrative problem. However, with proper planning and cooperation it can be fairly easily overcome.

When the St. Louis Educational Television Commission was created four years ago to establish noncommercial station KETC in that city, four representatives of the schools were named to the commission. The school system agreed to support the station financially in return for quality programs broadcast during school hours as well as in the evenings.

Discussed Scheduling

The school administrators then sat down with the operators of the station to schedule programs so that they could best meet the needs of the schools. During the first year of KETC's operation, about six curricular-type programs were broadcast during school hours. These were programs designed to enrich regular instruction and they were scheduled in such a way that teachers could make maximum use of them in the classroom.

Today KETC offers 17 different series of programs during school hours. At least 13 of these are of an instructional nature, from second-grade spelling to literature and science. During the evenings homework-type programs are presented, such as a current offering on space medicine. These the family is invited to view together, but the child, in many cases, will be asked to discuss the material covered in the next day's classes. Shows of an inservice training nature are also offered during the evening, especially for teachers.

The programs broadcast during school hours now reach a total of 2,601 classrooms. Most of the talent for them comes from the schools. The content for all instructional and enrichment programs is planned by content committees made up of teachers and curriculum experts from the St. Louis system.

Clair Tettemer, a schoolman with broadcast training, was appointed by the school system to direct the inschool programming operation for KETC. Working with him are two consultants from the schools, one on the elementary and the other on the secondary level.

Another example of scheduling cooperation between schools and non-commercial television can be seen in Pittsburgh, where station WQED devotes four hours of its schedule to classroom programs.

There are five special programs shown each day at a different time. These half-hour shows include "Conquest of Science," which takes high school general science students on tours to places of scientific interest; "The High Road," a language arts program for the intermediate grades that gives children pointers on notetaking, interviewing, reading for various purposes, preparing for tests, etc.; "Gateway to Business," for high school students taking business courses; "Under the Sun," for grade school science classes; and "Talking Town," a speech improvement session for the primary grades.

Once each week each program can be viewed at 9:05, 9:25, 1:32, 2:17 or 2:37 (*see box*, page 83). Intertwined with these "Schooltime" programs, are four Television Teaching Demonstration programs, in reading (9:45) for the fifth grade; arithmetic (11:05) for fifth grade; physics (1:00) for high school; and history and geography (1:50) for fifth grade.

Also shown during the school day is a program of games, songs and handwork for pre-school children at home. The afternoon and evening hours are devoted to educational programs for adults (Adult School of the Air, American Art Today) and to a children's corner which is primarily entertaining though it contains elements of education.

In addition, the station broadcasts makeup summer courses for students who have had difficulty

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Sculptor Carl Mose created this head in 10 half-hour televised sessions over station KETC in St. Louis to give the viewing public a better understanding of the problems of an artist.

The truth about

Don't get carried away by dreams of economy in your new elementary school. It's a tricky job to schedule multiple-use space. You may save square feet—and handicap your educational program.

Editor's Note: The following article is based on a tape-recorded interview with N. L. Engelhardt, Jr., and Frank Lopez, of Engelhardt, Engelhardt, Leggett and Cornell, educational consultants.

■ ■ ■ Why are educators gun-shy about multi-purpose rooms? Examine the case of an elementary school in New York state completed early last year . . .

The school has 18 classrooms for grades one through six. Over the opposition of the superintendent, but at the insistence of the school building committee, the architect designed a combination gymnasium-playroom and cafeteria. The school was occupied in early 1957. Since that time, except in very mild weather, the children have averaged less than one period a week of physical education—although the state mandates *four!*

This situation was completely predictable. The normal school week is 30 hours or about 36 class periods. There are 18 classes in the school. Of the 36 class periods during which the room can be used, about 20 a week are lost in setting up for lunch, feeding the children in two shifts, and tearing down the tables. This leaves a maximum of 16 class periods available for scheduling physical education.

Admittedly, this is an extreme case of poor planning. But it serves to make this important point—in all but the very small elementary schools, the combination of a gymnasium with any other function is certain to lead to an impossible scheduling situation.

In smaller schools

In a smaller school, however, the picture changes. Take the case of a six-room, or even an eight-room, elementary school. The children could be scheduled for physical education twice or even three times a week. If it was used three times a week (18 periods out of 36) there would still be ample time to use the space for feeding purposes and even have a few periods available for assembly or special use such as art or music.

A situation where you have *two* small elementary schools, each with its own multi-purpose room, provides a particularly ideal set-up. A full time, fully accredited physical education teacher can shuttle between the two schools. Optimum teacher utilization is feasible.

According to the Engelhardt organization, some school districts plan with the mistaken idea that a teacher can handle more children in a physical education class than in a classroom. They therefore fall into the trap of under-planning for their physical education needs. It is axiomatic that a single teacher cannot handle more than 35 to 40 children, in any athletic activity, with any degree of control. The practice is highly undesirable and downright dangerous. For that reason, they suggest that a multi-purpose playroom should not be planned if the school is to have nine or more classrooms immediately or in the future, unless the room is large enough to accommodate two or more classes and teacher stations. Even then, they discourage the idea of combining formal gymnasium space with a cafeteria. In preference, they suggest using the multi-purpose room for eating, assembly, and a limited number of special purpose activities.

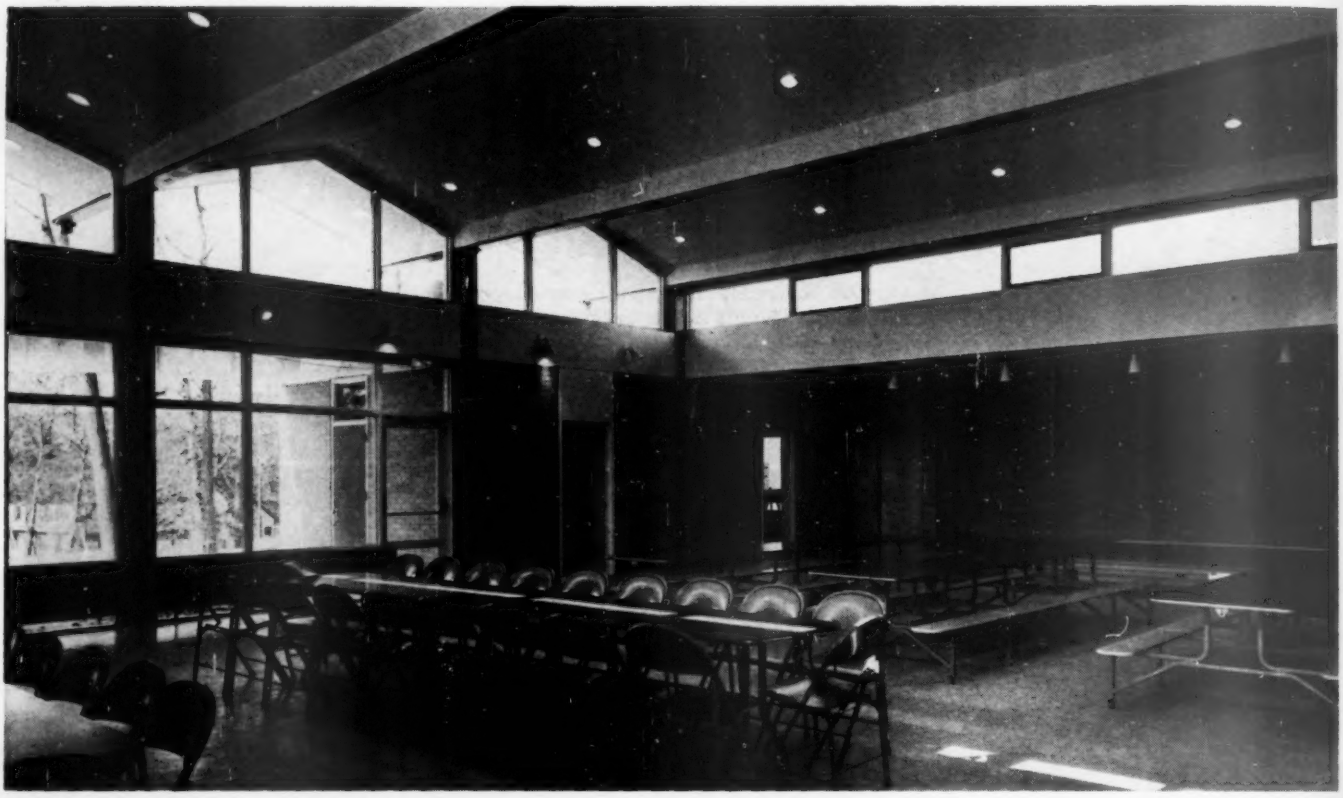
What is good practice?

As a starting point, it's well to remember that it's virtually impossible to schedule any space for 100% utilization. In fact, even 80% utilization is difficult to achieve in most situations. In an assembly room intended for other uses, for example, it is necessary to allow time for setting up chairs and then removing and storing them be-

multi-purpose rooms

An extremely successful *multi-purpose area in Southgate School, North Colonie, N. Y. The art alcove, seen in the background, houses permanent facilities. Cafeteria, art, dramatics, and music storage are adjacent to where they will be used.* **Henry L. Blatner,** *architect.* **Englehardt, Englehardt, Leggett & Cornell,** *consultants.*

You must consider the basic requirements for various activities



A successful multi-purpose room *for a small elementary school is to be found at Kissam Lane, in Glenhead, Long Island. Note small "stage" in background. For a close-up, see page 44 and below.*

fore the space can be re-used. The same is true in a cafeteria combination. In this case, it is wise to allow at least two hours a day for the preparation-feeding-cleanup procedure.

To understand fully the prerequisites for combination space, it is well to consider the basic educational and architectural requirements for certain activities. Here are some of the most obvious ones:

1) Physical education-social use-recreation. A playroom for lower elementary grades does not have as rigid standards as similar space at higher levels. Ceiling height, lighting, equipment, floor surfacing, can vary widely. This type of use is easily combinable with others if properly conceived.

2) Gymnasium. A true gym requires great height, much specialized equipment, and a special floor demanding expensive maintenance. It poses difficult acoustical, heating, ventilating and lighting problems. In short, it is so highly specialized that it is very difficult to combine with other spaces.

3) Eating. The cafeteria or lunchroom is more flexible in its demands than a gymnasium. Its ceiling height can vary, its flooring, wall surfaces, acoustical problems, and similar essentials, are less rigidly specified by its use. The same is true of its shape. It does demand special equipment, but often this can easily be portable or combined with equipment for other part time uses. It is moderately easy to combine with other usage.

4) Assembly space. The true "auditorium," considered as a com-

text continued on page 44

Cafeteria service *is through door at extreme left. Clerestory windows provide natural illumination.*

QUOTES FROM THE TAPE RECORDED INTERVIEW

Frank Lopez

Two hours out

"When you combine the cafeteria with an elementary gymnasium—we'll call it a play-room—you cut two hours right out of the heart of the school day because of the feeding problem. From about 11:30 until about 1:30 you're setting up, feeding, and tearing down. In addition, you've got the storeroom problem of where to put the tables." **Engelhardt**

Library-cafeteria won't work

"The library-cafeteria combination won't work. I know of one case where they have a library in the rear of the cafeteria, with the shelving standing right out in the open. Classroom experience in the library is lost. In any school, a library is really an extension of the classroom when properly employed." **Lopez**

Classroom lunch by choice

"A multi-purpose room doesn't have to be a special space. In the Blue Creek School in North Colonie, they are serving lunch to the boys and girls in the primary grades in their classrooms. This is done by choice, not emergency. They prefer it. It's not noisy. It's free from tension. It's not the big scramble in the cafeteria space. They sit down like little ladies and gentlemen in their own fashion, chatting with one another. The teacher stays with them. Food is wheeled down the corridor in a hot cart, the children line up outside their classrooms to get their trays and go back and sit down in the room. Thus, the classroom is truly a multi-purpose room." **Engelhardt**

Challenge architects

"Why do we see so many poorly designed multi-purpose rooms popping up all over the country? I think it's because architects have not been challenged to do a good job. An architect is not an educator. He must be completely briefed about the educational function of the particular space. He must be told about teaching techniques. If he lets his imagination roam, he may very well imagine teaching processes that do not exist. This happens. It's up to the educators to brief the architect, then his imagination can be challenged in line with good educational processes." **Lopez**

Wasting teacher time

"The big problem today is teacher utilization —making the most of teaching time. When a multi-purpose room is over-scheduled, and you take necessary space out from underneath the teacher, you are wasteful of his or her time. This is one of the reasons why a combination of gymnasium with other activities doesn't work. You think you save money on building, but you're wasting time." **Engelhardt**

N. L. Engelhardt

plete adult-type theater, is an anachronism, and an unfair problem to foist on the elementary school today except in rare cases where community-educational requirements demand it. More and more schools find that with modern educational concepts they need an intimate audience-stage relationship for educational purposes, not the formal stage in the infrequently used auditorium. These spaces require good vision, good acoustics, proper circulation and reasonable stage size. Research indicates that typical usage of the big auditorium during school hours is only about 10%. These large rooms do not combine well with other activities except, perhaps, community meeting use.

What combinations will work?

A particularly good example of a multi-purpose room that has worked out well in use can be found in the Southgate School in North Colonie, N. Y. The school has 12 classrooms plus a kindergarten. The special room combines cafeteria, assembly, art instruction center and community meeting room *(see cuts)*. Because the activities for which this room was designed have homogeneous requirements, almost total utilization is possible. The art alcove provides permanent storage and facilities for the itinerant art teacher who moves between several schools in the district, spending an hour or two every day in each of the schools. The children use the same tables during art class as they do for eating. No set-up or tear down is necessary. There is an elementary-school size stage, which doesn't have to be very large or very high. It serves very well for simple dramatic performances or as a setting for a motion picture screen. It is also extremely useful for community meetings and can be used for Girl and Boy Scout meetings, PTA, and similar after-school activities. Music classes can also spill over into the larger area when it is not in use for other purposes.

In a smaller school

A good example of how a physical education area can be combined with other activities in a smaller school can be found in the Kissam Lane elementary school at Glen Head, N. Y. Here the architect designed a combination playroom-assembly-cafeteria-community area *(see cuts)*.

Kissam Lane is a "neighborhood type" primary school accommodating grades K-4. It has six classrooms (two kindergartens) in close physical conjunction with the multi-purpose area. Since all of the children can eat at once, this requires little more than an hour a day.

Unlike a large elementary school or high school, a primary school works under a less rigid bell-ringing schedule, so teachers are able to move their classes in and out of the multi-purpose space almost at will. Much of the moveable equipment can be left in place because of the homogeneity of the activities for which the room is scheduled. A small "stage," which is really no more than an elevated area set into one wall, provides good facilities for visual aids, assemblies, and community use with little difficulty.

Other combinable uses

Unfortunately, the general approach to multi-purpose rooms is usually based on the hope of economy. While this is a reasonable end to seek, it too often can lead to false economies at the expense of educational values.

It may be more rewarding, particularly on the secondary level, to think in terms of the *positive* advantages to be gained from combining *academic activities* which complement one another in the educational process. Increasingly, secondary school educators are becoming aware of the need to break down the barriers between departments or subjects in the interest of turning out graduates with a "complete picture."

Rooms combining such studies can not only effect savings without diluting education but they may, in fact, increase the value of the courses taught.

By the same token, on the elementary level it is worth investigating the following areas for combination rooms:

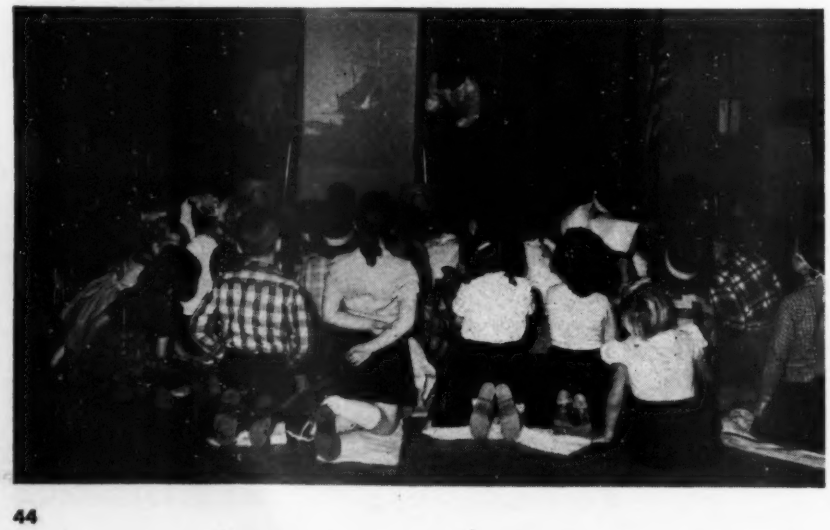
1) Art-music, where some interrelations exist and space and cost savings are potentially worth considering.

2) Speech-dramatics-demonstrations-music, where both educational and cost considerations are compatible.

3) Teachers dining-lounge-workroom, which may stimulate the exchange of ideas among the staff.

4) Visual aids-special subjects, when the proscribed curriculum can make use of such facilities. **End**

Small stage *at Kissam Lane is ideal for primary level program. Drapes permit room to be darkened easily for audio-visual work. Opposite wall provides built-in storage.*



DO-IT-YOURSELF school financing

Here's how one small midwestern community, burdened with classroom shortages, financed its own school construction when its bond issue could not be sold. Since it took this bold step, other school districts are trying to go it alone, too.

THE PROBLEM: Ready to float a $1.15 million bond issue to finance a desperately needed high school building, a district discovers that no investment firm wants the bonds at the statutory limit of 4%. State aid is not available and Federal aid, because of red tape, is out of the question. The school has only 120 days to accept a contractor's bargain bid and the need for the school grows more urgent daily.

THE COMMUNITY: Growing Boonville in Boon Township (population 14,800), a southern Indiana coal-mining area, 15 miles from industrial Evansville, assessed valuation $10 million. The district's five schools, designed to house 1,700 pupils, hold more than 1,900. New housing developments, overflowing from nearby Evansville, mean a growing classroom shortage.

THE SOLUTION: Sell the bonds to the people of your own community. Ignoring the laughter of investment experts, Boonville puts the bonds up for sale at 4% interest. The people of Boonville oversubscribe the $1.15 million by enough to build a new elementary school, too. Heartened by Boonville's pioneering, other school districts are considering this plan. Here's how Boonville did it:

Boonville, Ind., is not a wealthy community. The 14,800 people of Boon Township are probably no more "school conscious" than the people of any community of similar size and economy. Overcrowding of Boonville's five schools, while typical, is no worse than that of many a US community these days. Yet the school district was able not only to rally public support for a new high school, but to persuade the taxpayers to put up the cash in advance.

Boonville did it well within the framework of existing Indiana state law, which is not unique in most respects. Whether any other school district would be able to execute the same program, might be affected to some extent by individual state laws.

The first of two hurdles

In early 1956, Boonville's problem was more than mere failure to sell its bonds. The school district's borrowing capacity (2% of assessed valuation under state law) would not provide adequate funds for the new high school. But there was a loophole: Indiana law also permits the formation of a holding corporation to build a new school, issue bonds (at 4% interest) to pay for it, and lease the building to the school district until the bonds are retired, at which time the school district becomes the owner.

Some 200 civic-minded Boonville residents, long concerned with school problems, formed the Boonville-Boon Township School Building Corp., and issued $7,510 worth of stock for operating purposes. Under law, the stock gave its holders voting rights, but no interest is paid when the stock is redeemed. The officers of the corporation, elected by the non-profiting stockholders, were: a housewife; a circuit court judge, the president of the local Peoples Trust and Savings Bank, an appliance dealer, and an attorney who was president of the Boonville National Bank.

The presence of two bankers on the board was no accident. Says Attorney Kenneth Weyerbacher, one of the bankers, "Any plan such as we eventually worked out, depends entirely on the cooperation of the banks, and a free-thinking banker on the board is an absolute necessity."

The corporation's entire program was conducted with the step by step approval of the school board. An architect was hired, plans drawn, and bids from contractors requested. Five bids came in. The corporation board accepted the lowest, a particularly attractive offer, and awarded a contract subject to sale of the $1.15 million in bonds. (Cost of construction was actually $949,888, the balance covering land acquisition, engineering and legal expenses.) The contract also allowed the contractor to withdraw his offer in 120 days, which put a time limit on all that followed.

When the bonds were put out for

bids, there were no offers. The bond market had begun to slide in December of 1956. Bond houses were buying government issues which, although they paid only 3¼% interest, could be cashed at any time. Municipal bonds, with their fixed maturity dates, were of no interest.

The corporation appealed, as a hardship case, to the Indiana Common School Fund Building Commission whose function it is to buy such bonds when they cannot be sold otherwise. But the appeal came during a bitter shift in Indiana governors and the application was turned down on the ground that no funds were available. The corporation's officers vetoed a suggestion to request Federal aid because, among other reasons, unraveling red tape would take considerably longer than the 120-day time limit.

The second hurdle

Credit for the idea to sell the bonds locally goes to Weyerbacher although, he explained later, "it seemed like an almost impossible task at the time. Our community is rather small and not wealthy in any sense." In spite of this, the directors of the holding company felt they had no other alternative. This decision made, the corporation met with newspaper and radio representatives and was assured of ample publicity. At the same time, both Boonville banks agreed to buy bonds to the legal limit—10% of their total capital and surplus. Weyerbacher and Waldo Hendrickson, the two bankers on the corporation board, also obtained pledges from the two banks in nearby Evansville and from several smaller banks in Warrick County. Altogether, the banks were to buy only $300,000 worth of bonds. The remainder had to come from private individuals in the Boonville area.

Nobody on the board, says Weyerbacher, had any idea of how to go about selling the bonds. But they decided to act as their own brokers and thus save themselves and the buyers the cost of brokerage fees. They obtained maturity schedules from an Indianapolis investment house and from a Chicago bank and put the bonds up for sale in denominations of $1,000 each.

Much of the selling was done, in person, by members of the corporation. But it also drafted, and distributed widely, a seven-page prospectus which outlined in detail the bond proposal and how it worked, explained the need for the new school, and gave an economic appraisal of the entire community.

Actually, holding company officers commented later, the sale was aided by public ignorance. Most people, they discovered, did not know that municipal bonds were available to individuals and they were pleased to learn they could buy them.

"The investment houses," Weyerbacher said, "told us it couldn't be done. They laughed at us and discouraged us."

But, in less than three weeks, the entire amount of the issue had been pledged by the banks and by 117 individuals.

In fact, total pledges amounted to $100,000 in excess of the issue.

Boonville banks had given the project another push by offering to loan money to bond purchasers at 4% interest with the bonds as sole collateral. "Bankers went out of their way," says Weyerbacher, "to assure people that the bonds really were a good investment."

Maturity dates on the bonds sold were allocated at a public drawing in the circuit courtroom in Boonville. Names of the 117 buyers were dropped into a hat and drawn by the president of the senior class at the township high school.

"There was no big money involved in the sale," Weyerbacher said, "although some of the purchasers did take rather large amounts."

The last hurdle

Construction of the new school has begun and it will be ready for occupancy in September of this year, when a heavy influx of new students is expected.

In addition to solving a seemingly hopeless financial problem, the bond sale served also to stimulate considerable interest in Boonville schools. "Many people who we originally thought would have no interest in the project, have now become most enthusiastic about the new school," says Weyerbacher.

Boonville's daring step has already proved a blessing to at least two other Indiana school districts in similar plights. Tell City, unable to dispose of only $225,000 in bonds through normal channels, put them on the local market. Troy Township, in Perry County, is conducting a similar program.

Had Boonville only known how successful its project was going to be, it would have taken it farther. "We found that we could also have built a grade school," Weyerbacher said, "since we could have obtained subscriptions for an additional $50,000 worth of bonds." **End**

The Press Comments:

" . . . . . there are decided advantages to the way it (the Boonville project) was done. In the first place, the local drive must have tapped some money sources the professional bond salesman could not reach. Bringing new money into the bond market is in itself an anti-inflationary move.

"Secondly, the experiment showed there's still a chance for the local community and even for the individual to get what he needs by his own efforts. He needn't be the hopeless pawn of economic and political trends. By working out his own solution, he is contributing to the variety of thought and procedures that has helped make America great.

"To put it more bluntly, despite the habit of passing laws to take care of things, there's still more than one way to skin a cat. And it's a good thing for the country that there are people willing to look for the other ways." The Evansville (Ind.) Courier.

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Super Hil-Tone has a special property (called AD-SORPTIVE action) which attracts and holds dirt. After you sweep, a thin protective film is left on the floor. This film attracts particles of germ laden dust as they are brought in, holds them much as a magnet holds nails.

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And—Super Hil-Tone's non-oily film left after sweeping actually protects the floor's finish, makes it last longer—helps bring out to the full the rich, natural sheen of the flooring and its finish.

The big opportunity to save money in floor care is NOT in the pennies spent for materials. Rather, it's in the dollars that go for labor. Super Hil-Tone can help you save real money, by making sweeping a "walk-over". Here is still another proof of the axiom, *Economy in floor maintenance never comes from cheap materials.*

The Hillyard "Maintaineer®" shows you how to take advantage of modern labor-saving treatment techniques and short cuts. He's your own trained floor care specialist, *"On Your Staff, Not Your Payroll"*

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Firm or Institution.....

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City.....State.....

(For more information, see last page)

How your district can make low-cost movies

A two-man team in Whittier, Calif., is making professional movies at a fraction of the professional cost. Your district can do it too.

■ ■ ■ A school district in California has found a way to produce high quality movies—in color and with a sound track—for just $21 per running minute. The usual commercial rate is about $1,000 per minute.

Whittier Union High district has turned out four of these low-cost productions, each averaging 18 minutes, for $350 to $400 per film. Although all of Whittier's movies are for public relations purposes, the methods used could be adapted for any kind of movie.

"Competent volunteers is the essence of the system," says John De Noon, coordinator of audio-visual materials for the district, who is one of the two men essentially responsible for Whittier's successful movies. The other man involved is William Keim, child welfare and attendance director at one of the schools.

Together these men write the scripts, get and transport props, build the shooting schedule, light each scene, direct it, photograph it and edit the developed film.

"It doesn't have to be a two-man job," says De Noon. "We happen to work well together and enjoy doing it. But as a matter of fact, it's essential on a job of this sort to have the support of the whole school district. Not just the superintendent, the board, teachers and students, either, but the whole community. Parents, businessmen, everybody has to cooperate."

Enthusiasm and interest are basic ingredients in these movies but there are other essentials, too. For one, if an $18,000 film is going to be produced for under $400, a maximum number of services and supplies must be obtained free. A lot of the equipment used in making Whittier's films is borrowed, including the camera. Film is purchased from a local merchant at a discount.

Planning is another essential ingredient. Every shot is planned down to the last detail. Everything is set beforehand. When a scene calls for several actors, camera positions and movements of people are diagrammed in detail before shooting. Once approved, no deviation from script is allowed.

"And you'd be surprised how hard this is to enforce," says Keim. "People whom we've known for years suddenly develop temperament when they become actors. It's doubly hard when you remember that our pictures are supposed to create goodwill. We have to be careful to start building that right while we're shooting."

By careful planning, Keim and De Noon are able to obtain 800 feet of useable film out of every 1,000 shot. "The commercial studios expect to save only one foot of every seven," says Keim.

All the Whittier films have had the same purpose—to familiarize citizens with the modern high school

curriculum, educational goals, problems of growth and financing. However, each film has *emphasized* just one of these.

The 1955 film "Report to the People," for example, dramatized the rapid postwar growth of the district. It opened with aerial views of the city, photographed by a local dentist who is a light plane enthusiast and a good photographer.

Subsequent shots pictured newly-built shopping centers and real estate housing developments. This led logically to a sequence showing a new high school under construction. Always stressing public relations, the film concentrated on the local contractor and workmen who were doing the job.

From there the script moved into an explanation of the curriculum and ended by discussing the increased financial needs of the expanding school district.

The total cost for this movie was $383.

Three of Whittier's movies made reference to particular tax rate or bond issue referendums. Two of these were won and the lone defeat was attributed to factors beyond the control of the school district. The movies were considered a major factor in the two victories.

The one film that makes no reference to a specific election is titled "Our Share in America." The emphasis of this movie is on understanding the educational goals of a modern high school curriculum. It has been found a very effective medium for presentation to PTAs, service groups, and other clubs.

Based on their experience so far, De Noon and Keim offer these points of advice for anyone wishing to embark on a movie project.

1. Never expose a foot of film without consulting a light meter.

2. Don't move the camera unless you can't avoid it. Attempts at "pan" shots are tricky and costly. They waste too much footage.

3. Take great pains with the editing. Cutting is perhaps the most important technical part of the job.

4. Don't be afraid to ask questions. Every supplier of materials or services you are using will be glad to offer advice and suggestions.

"It takes time and patience," the two-man team says. "But when the job is done, your satisfaction makes the work worth while." **End**

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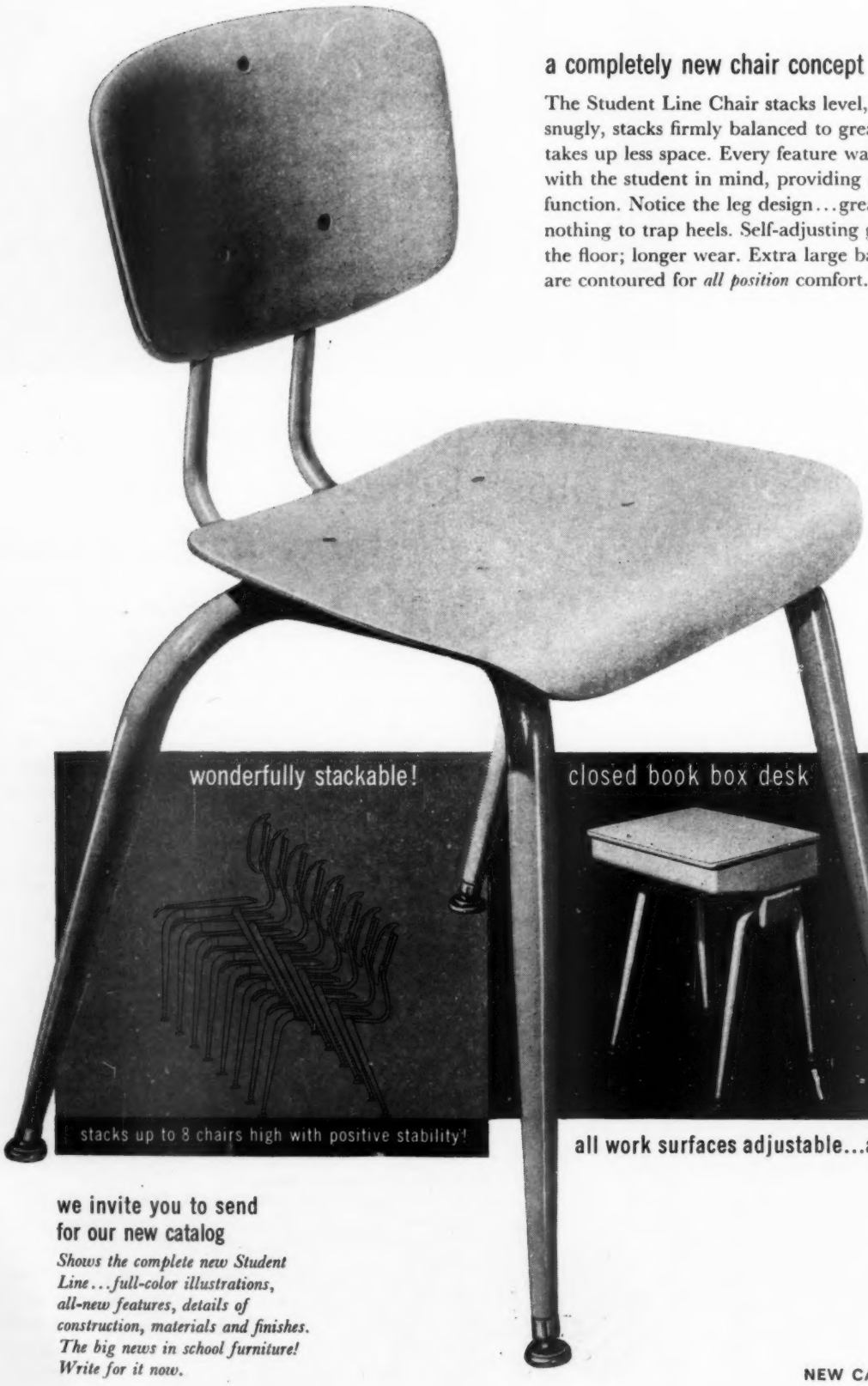
superbly designed with every advanced feature



a completely new chair concept

The Student Line Chair stacks level, stacks snugly, stacks firmly balanced to greater number—takes up less space. Every feature was designed with the student in mind, providing advanced function. Notice the leg design...greater stability—nothing to trap heels. Self-adjusting glides hug the floor; longer wear. Extra large back and seat are contoured for *all position* comfort.

wonderfully stackable!

stacks up to 8 chairs high with positive stability!

closed book box desk

all work surfaces adjustable...a Peabody exclusive!

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Shows the complete new Student Line...full-color illustrations, all-new features, details of construction, materials and finishes. The big news in school furniture! Write for it now.

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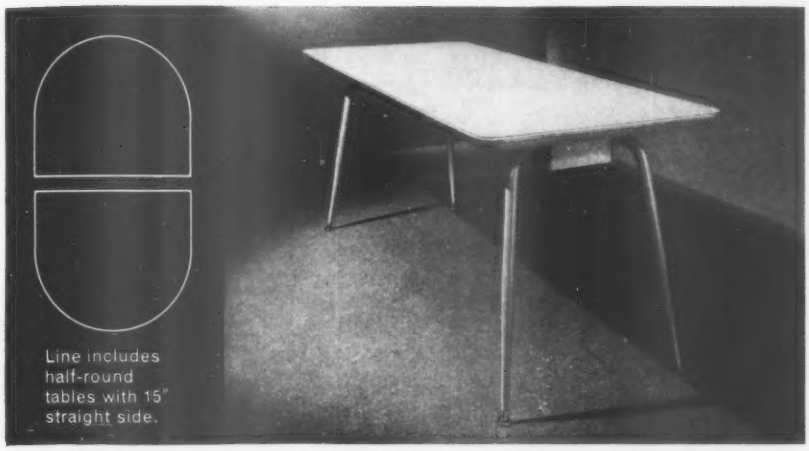
the all-new "Student Line"

for comfort, adjustability and rugged service



efficient "Student Line" tables

An entirely new concept in streamlined stability. Sturdy free-standing design; no bars or cross braces to cramp legs, or to collect dust. Tables easily adjust to three 1" height positions. All leg assemblies inset, leaving all corners open for efficient, unimpeded use. Oversize self-adjusting floor glides. Small sizes with plywood tops, larger sizes all hollow core, light weight, warp resistant. All work surfaces melamine plastic. A full range of all models and sizes up to 96" to meet every educational need.

new "matching" teacher's desks

...to round out the all-new and highly functional Student Line. Handsome, durable, exceptionally roomy teachers' desks. Available in two sizes: 30" x 48" with single right hand metal drawer pedestal; 30" x 60" with both right hand and left hand pedestals. Top surface is non-reflective, with rich natural maple wood grain pattern, melamine plastic surfaces. These desks provide generous space for work...every advanced feature for handiness and comfort. Truly an achievement in superb design.

under-seat book storage rack available as an accessory...large size...accessible from either side

PEABODY

THE PEABODY SEATING COMPANY, INC., NORTH MANCHESTER, INDIANA

(For more information, see last page)

A monthly review of ideas, new products and helpful hints

Businessmen do care about their schools

So you think businessmen aren't interested in their local schools? Here's proof that they are, and that they want to do more to help with their community's education.

Management Methods magazine, sister publication of SCHOOL MANAGEMENT, in its January issue carried an article on how business can help its local schools. The article mentioned the pamphlet "How Business and Schools Work Together" published by the National Citizens Council for Better Schools, and offered to secure it for any businessmen interested enough to write.

Just six weeks after the issue was in the hands of its readers, more than 700 individual requests had been received for the pamphlet. And many of the correspondents noted that they had long been seeking ways to help their local schools and were glad to have something to guide them.

Here is impressive proof that businessmen want to help their schools. Now it is up to the schools themselves to show what kind of help they want and to help business supply it.

Portable bubbler solves sanitation problem

Sparked by athletic trainers Richard Materson and Herman Wechter, the Miami Beach Senior High School Wheel Club sponsored an investigation into water distribution to players during games. The old system, it appears, varied from chewing on wet towels, to buckets and community dippers. They tried using paper cups, serviced by dippers, but "there just wasn't enough time during the games to keep filling new cups" according to the trainers. Trainers and club members alike were alarmed at the implications of lack of sanitation and the danger of contagion.

After three years of checking, they finally discovered a portable stainless steel water bubbler used by many pro teams. Called the Behrens Sanitary "Water Bubbler," the unit has a five-gallon sanitary tank mounted on rubber-tired wheels for easy rolling, and two modern sanitary push button fountains that deliver cool water under constant pressure. The unit is easy to fill, ice and clean.

With the cooperation of the Wheel Club, Miami Beach purchased the new bubbler. According to trainers Materson and Wechter, the bubbler has been an "extremely rewarding investment and is used with enthusiasm and confidence at all major sports." They suggest that service clubs in other schools get behind similar purchases, for the initial cost is "constantly repaid by the prevention of the spread of disease."

For more information, circle number 786 on the Reader Service Card.

New school has room for driver education

The new Niles, O., high school has a room designed especially for driver education according to a report from the National Commission on Safety Education.

The room, which was designed with the assistance of driver education teachers, has a connecting garage and shop.

Dog helps guard school district

Bullitt, a three-year old black German shepherd, cost the Great Neck, N. Y., school district $1,000 and she's worth every penny of it, says Norman Draper, administrator for buildings and grounds.

She gives added security for the 115-acre site of the new schools under construction in Lake Success. The dog works with five watchmen on the 4 p.m. to 12:30 a.m. shift on weekdays and from 8 a.m. to midnight on weekends and holidays.

The dog guard duty was first thought of when construction was scheduled to start on a $9 million junior and senior high school three years ago. After an intensive training course at Canine College in West Redding, Conn., Bullitt was delivered to the school district two years ago.

Since she arrived, pilferage has almost ceased and her presence has made more patrols possible over greater areas.

On command, the dog will search buildings and rooms, detain intruders and protect the guard if he is assaulted. The dog is also trained to free a guard if he is bound, and she calls attention to open windows and lights.

Bullitt is gentle with children and many Great Neck youngsters consider her a pet. She works without a leash, directly ahead of her handler and within call.

For ten minutes each morning the German shepherd undergoes obedience training outside her kennel in the administration building. New guards receive basic instructions for working with Bullitt, plus a week of advanced training from John Behan, the director of Canine College.

Bullitt has done so well as a guard, a second dog is being trained for the Great Neck schools. She will report for duty this summer.

Plastic light control in Pequannock school

The new high school in Pequannock, N. J., is the first built in that state using translucent plastic panels to provide diffused, glare-free light for classrooms, gymnasium and assembly. The architects who designed the school—LaPierre, Litchfield and Partners—and state building officials conducted exhaustive tests with the new material before it was approved for school use.

The result has saved Pequannock taxpayers many dollars in school construction costs, and at the same time provides students with plenty of natural daylight in their study rooms. Each room has regular glass windows at eye level, but they're far smaller and less costly than those used in the usual construction. The upper part of the classroom window-wall consists of green-tinted, corrugated plastic sheets that let in light but at the same time minimize glare.

In window and construction costs, the architects estimate this treatment saved many days of construction time and resulted in substantial cost reductions.

In addition to providing light, the plastic panels add color and design to give Pequannock's new school a distinctive and pleasing appearance

Stephen Watts Kearney High School, Linda Vista, Calif. Architects: Frank L. Hope & Associates, San Diego, Calif.

Environment and Daylight...

HOW THEY WORK TOGETHER FOR BETTER LEARNING

Put students in a classroom short on window area and they will feel closed in . . . restless . . . long to be outdoors.

But give them a classroom flooded with daylight . . . let them see the grass, the trees and sky around them . . . and their whole attitude improves. They are more alert, more interested, more eager.

Daylight and nature work together to make a natural environment for learning.*

Recognizing that most of the nation is cloudy and overcast most of the year (according to U. S. Weather Bureau records) and the cloudiest months are school months, the problem is how to bring in *enough* daylight.

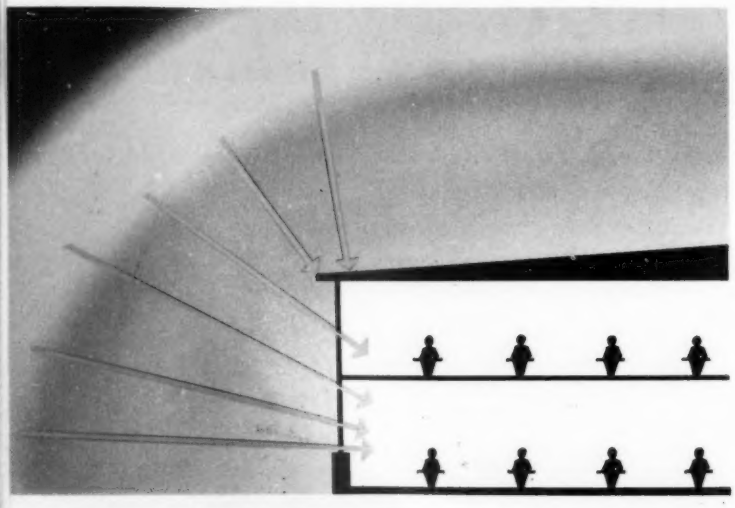
Most of the available daylight is diffused light,

(*continued on overleaf*)

*A book on this subject has been published by Reinhold Press. Author: Lawrence B. Perkins, A.I.A., one of America's foremost school architects.

LOF GLASS

Floor-to-ceiling clear glass admits abundant daylight even on overcast days. Neal Junior High School, North Chicago, Illinois. Architects: Fisher and Bryant, Chicago.



approaching from every point in the sky dome facing a window. As much as one-third of it may reflect from the ground, and much of it from nearby buildings or wings of your own school.

So we need the largest possible areas of glass to gather in this light . . . *clear* glass from floor (or low sill) to ceiling, and room wide. Daylight Walls, they're called. Only on rare occasions is daylight too bright for comfort. When this occurs, flexible shading devices (such as Venetian blinds) will take care of it.

What about the glass, itself? Nothing brings in *more* daylight than *clear*, *flat* glass. See the light transmittance chart and recommendations on the next page.

Glass in these doors and side lights is **Tuf-flex®** tempered plate glass. **Tuf-flex** resists impact, reduces danger and maintenance costs. Connellsville Joint School, Connellsville, Pa. Architects: Hunter, Caldwell and Campbell, Altoona, Pa.

LIGHT TRANSMITTANCE CHART	
GLASS TYPE	Average Transmittance at Normal Incidence
Sheet Glass	90.4%
⅛" Polished Plate Glass	90.9%
¼" Polished Plate Glass	90.0%
Thermopane® Insulating Glass	82.6%*
Configurated Flat Glass	52.3-92.5%**
Corrugated Glass	83.0%
Directional Glass Block	Less than 50.0%

**Made of two lights of ⅛" plate glass*
***Variance due to difference in patterns*

Recommendations as summarized by Prof. R. L. Biesele, Jr.,* of Southern Methodist University before the Illuminating Engineering Society:

(a) Window areas should extend from wall to wall and as near to the ceiling as possible. Mullions, muntins or other structural details should be held to a minimum.

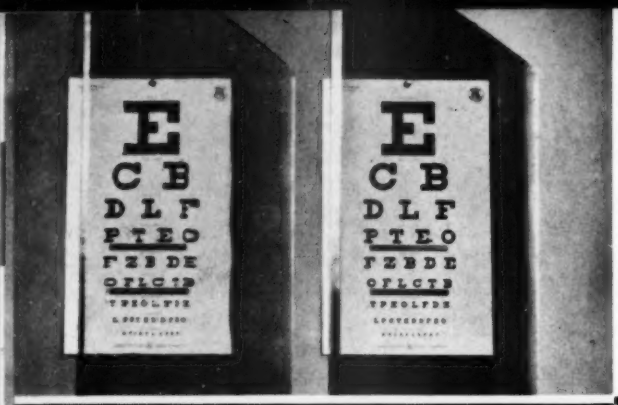
(b) Clear glass should be employed for the maximum admission of daylight and to permit clear vision to the out-of-doors.

(c) Venetian blinds provide effective control for direct sunlight, high sky brightness, or reflected glare from the outside; assist the distribution of light in the room and permit natural ventilation.

(d) A seating arrangement should be employed which minimizes brightness ratios within the normal field of vision.

(e) Highly reflecting, non-glossy surface finishes within the limits recommended in the American Standard Practice for School Lighting should be used to increase illumination by inter-reflection and for proper control of brightness.

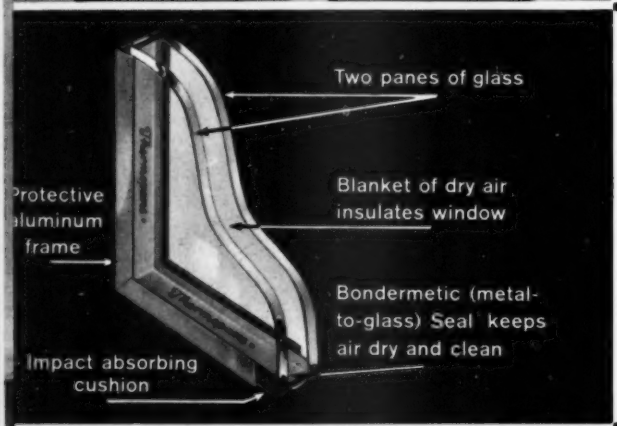
*A member of the Committee which wrote the Recommended Practice of Daylighting for the Illuminating Engineering Society. These recommendations are explained more fully in our 24-page Daylight Walls book. Use coupon on the next page for your copy.



PARALLEL-O-PLATE®

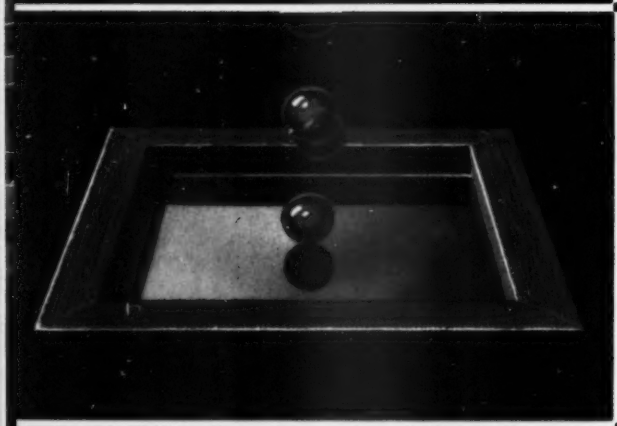
Cast a critical eye at the letters on the two eye-testing charts. The one on the left was taken through a pane of sheet glass; the one on the right through *Parallel-O-Plate* Glass.

With sheet glass, distortion is inevitable. With *Parallel-O-Plate*, you get maximum freedom from distortion. That's because of L·O·F's *twin-grinding* process in which both surfaces of the glass are ground simultaneously. Recommended for entrances and any other areas where architectural beauty and maximum lack of distortion are primary considerations.


Two panes of glass
Protective aluminum frame
Blanket of dry air insulates window
Bondermetic (metal-to-glass) Seal keeps air dry and clean
Impact absorbing cushion

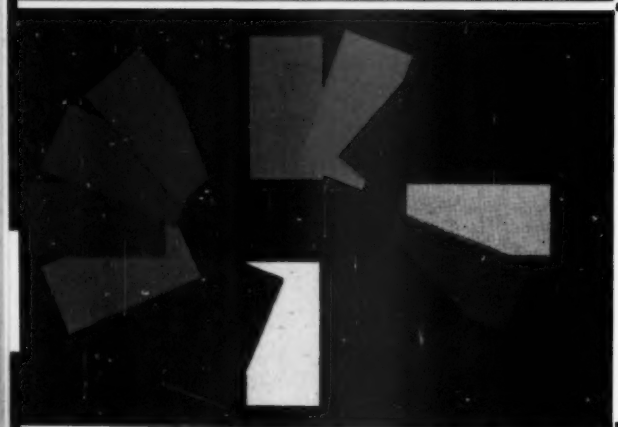
THERMOPANE®

Thermopane insulating glass puts two panes and a sealed-in blanket of dry, clean air between the children and the outdoors. Drafts are reduced so rooms are more comfortable, especially for children sitting close to windows. *Thermopane* even deadens outside noises. And the heat loss you would get through single panes is cut almost in half. Recommended for all windows where its insulating properties would result in substantial savings in winter.



TUF-FLEX®

Here you see a half-pound (1⅜″ diameter) steel ball, dropped from a height of ten feet, bouncing harmlessly off ¼″-thick *Tuf-flex* heat-strengthened glass. *Tuf-flex* is 3 to 5 times stronger than regular plate glass of the same thickness. If maximum resistance is reached, *Tuf-flex* disintegrates into relatively harmless, rock-salt size particles. Recommended for gymnasiums, entrance doors and side lights, areas facing playgrounds . . . any area where youngsters and missiles are in rapid motion.



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that's different from any other school in the state. The gymnasium, for example, with vertical plastic sheets eight feet high, reflects the styling of the most modern city skyscrapers.

In addition to lighting control, the use of plastic sheets also simplified construction. Bearing beams are supported by masonry walls. The plastic sheets were simply attached as non-bearing, curtain walls providing both light and pleasing design. This method is estimated to cost much less than other natural lighting designs for gymnasiums, and promises further savings in the reduced use of electrical lighting.

Preparing eighth-graders for high school

Taking the step from an elementary to a high school can be a bewildering experience for 13-year-olds. They are suddenly confronted with a selection of courses, with room and teacher changes and a variety of other new experiences. To help eighth grade students over this hump, the Utica, N. Y., public schools have prepared a 38-page booklet called "Moving up to High School."

In text and pictures, the booklet tells the student what he can expect in high school, what opportunities, responsibilities and privileges he will have. It also tells what will be expected of him.

The book follows three students, two boys and a girl, through their varying first-year schedules. It examines course selection, special services and the importance of extra curricular activities.

The effect of the book on the Utica system has already been felt. Students are better prepared for their high school experience. There are fewer "lost souls" in the first few weeks of school. Also, by pointing out the value of a high school degree, in terms of future earning power, the book has cut down considerably on the problem of drop-outs.

As Superintendent Theodore F. Reusswig says in his introduction: "No doubt you are wondering about the 'honest-to-goodness' reasons for going to high school. . . . It is the purpose of this book to help you find the answers."

Vermont schedules outdoor education workshop

If you want to promote outdoor education, your school district might follow the lead of the Vermont Department of Education.

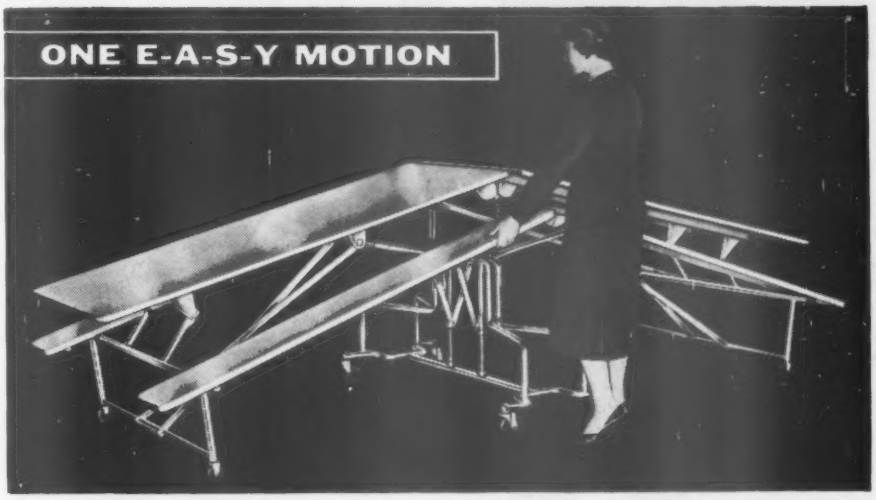
A committee of the division of health and physical education has set up a three-day workshop of conservation educators to study a new concept of outdoor education. It will be held at Camp Billings, Lake Fairlee, Vt. on June 24-26.

One of the nation's foremost pioneers in outdoor education, Julian W. Smith of Michigan, will take an active part in the program. On the agenda is a school camping class as a pilot project that may be observed by the workshop participants.

Cooperating groups include members of the fish and game service, state forestry service, water resources board, department of recreation, soil conservation service, as well as several instructors in gun handling, water safety and so on. Conservation practices will be tied in with a general appreciation of outdoor activities.

Participants in the workshop will include school superintendents, principals, key parents, PTA presidents, district PTA leaders, school board members, college presidents, educational leaders from the state level and other key people in a position to carry on the program of outdoor education.

NEW HOWMATIC "12" BENCH AND TABLE

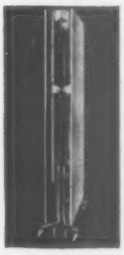


OPENS IN 3 SECONDS!
FOLDS IN 3 SECONDS!

The new HOWMATIC "12"* bench and table opens or folds in one, easy, *automatic* action! Opened, a foolproof safety lock grips this 12 foot unit automatically. Folded, it remains securely locked, the release bar at adult height.

Even in close quarters, the HOWMATIC is compact and maneuverable: Folded, the HOWMATIC's four, large swivel casters make the unit easy to move in all directions. Opened, four fixed casters on bench legs secure the unit firmly.

All HOWMATIC surfaces are always exposed for easy cleaning, even when the unit is folded. This feature—exclusive with the HOWMATIC "12"—cuts cleaning time up to 50%!



The new, 12 ft., benchless HOWMATIC "T". Unique Floating Action makes opening or closing this unit almost effortless . . . The center, castered legs touch the floor at all times; the four corner legs touch the ground only when the unit is fully opened ...They anchor the HOWMATIC in place. This eliminates opening and closing drag, makes the HOWMATIC "T" almost effortless to operate.

FREE! Get complete information on the BIG 3 in school mobile units: (1) the new HOWMATIC "12" Bench and Table, (2) the new benchless HOWMATIC "T" (3) the 6 ft. HOWE Bench and Table (*not illustrated*). For free, illustrated folder, use the handy coupon today!

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GENTLEMEN: Please send me your free, illustrated folder containing complete data on the new HOWMATIC "12", the new, 12 ft. HOWMATIC "T" and the 6 ft. HOWE Bench and Table.

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City_____
Zone_____ State_____

*Pat. Pend.

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(For more information, see last page)

Call the man from Fenestra for

Classroom doors at the lowest installed cost!

It looks like a costly custom-made door, but this is a *stock* door by Fenestra®, specially engineered for school use.

These new Fenestra Hollow Metal Doors swing open smoothly, close quietly. There's "quiet", built into every Fenestra door. You save year after year on maintenance because Fenestra Doors can't warp, swell, stick or splinter. They last a lifetime! And in addition, you get the lowest installed cost because:

1. You buy a *complete package*—door, frame, hardware, completely machined and fitted at the factory.

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3. You have a complete selection of door types (1⅜" and 1¾") of distinctive designs and features—*all mass produced.* Custom quality at *stock* door prices!

Ask your Fenestra representative (listed in the Yellow Pages) to help you in your selection and specification of doors, frames and hardware. Or, write to Fenestra Incorporated, Department S-4, 3407 Griffin Street, Detroit 11, Michigan.

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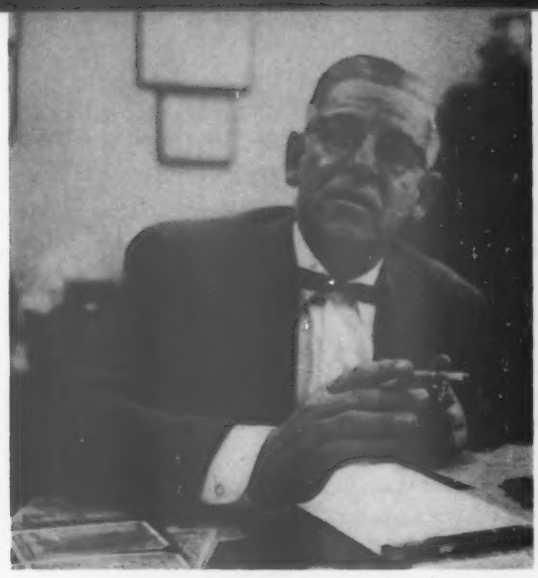
(For more information, see last page)

A Curriculum Report:



Superintendent G. B. Wadzeck

How San Angelo meets the needs of both "fast" and "slow" students

This remarkable program starts in first grade. It exacts from each student his best work in every subject area—then, carefully feeds his proven abilities. Here's a step-by-step explanation of how it has been made to operate successfully.

■ ■ ■ One of the most exciting curriculum programs in the United States is being conducted in San Angelo, Tex., under the guidance of a dedicated and insistant administrator. In operation for almost three years, it may well become the model for other educators seeking a common-sense course between so-called "progressive" education and Three-R pedagogy.

Four essential points of difference separate the San Angelo program from virtually any curriculum plan now in operation.

(1) It emphasizes a traditional academic program for all pupils, regardless of their scholastic abilities.

(2) It provides each child with a custom-made program geared to his individual abilities in every subject area.

(3) The child's actual record of achievement determines the curriculum which he takes.

(4) The program starts in first grade.

General background

San Angelo, is a city of 80,000 people in western Texas. There are 10,000 students enrolled in its schools. Three sharply-defined ethnic groups are present: Latin Americans, mostly Mexican (about 10% of the students), many of whom speak nothing but Spanish in their homes; Negroes, who comprise about 8% of the population, and the so-called "Anglos", or whites. The schools were completely integrated shortly after the Supreme Court decision.

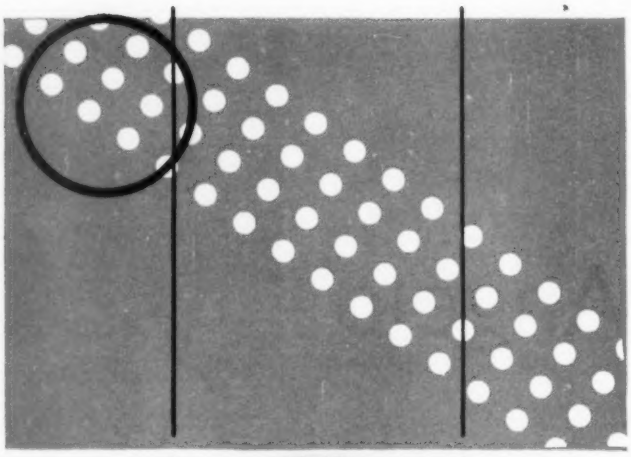
Since the schools in Texas operate under a law that requires that children be six years of age before the first day of September to be able to enter school, few San Angelo children have attended kindergarten. Texas schools operate on a nine-month basis, with only 175 teaching days, a limiting situation compared to schools on the usual ten-month year.

The following tape-recorded interview with Mr. G. B. Wadzeck, superintendent, was conducted over a two-day period in early 1958.

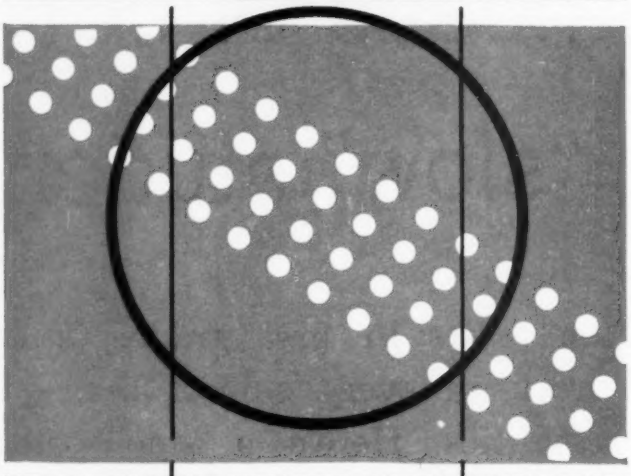
TO LEARN ABOUT SAN ANGELO'S PROGRAM, PLEASE TURN THE PAGE ►

The theory of three-rail

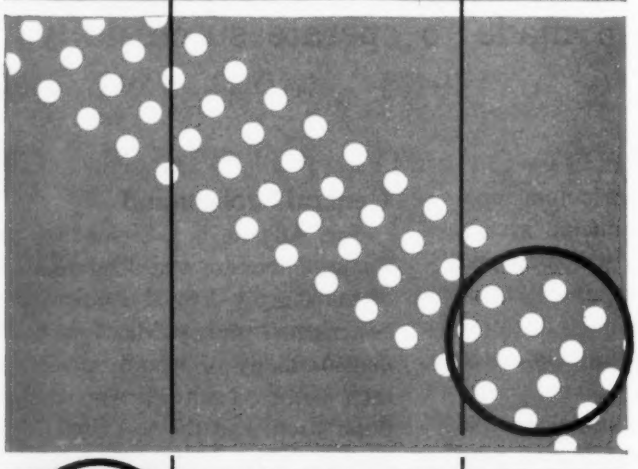
1
SINGLE
RAIL
CURRICULUM
FAST



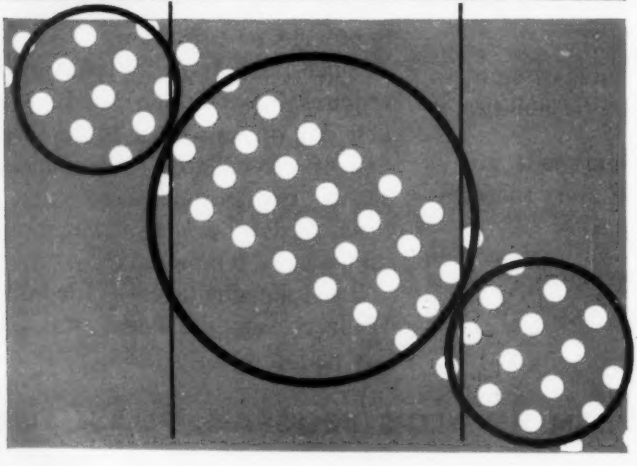
2
SINGLE
RAIL
CURRICULUM
AVERAGE



3
SINGLE
RAIL
CURRICULUM
SLOW



4
THREE
RAIL
CURRICULUM
EQUAL
OPPORTUNITY



The "three-rail" approach to education is very simple. It recognizes the fact that, regardless of how children are grouped, there is always one child in any subject area who is the "fastest" and there is always one who is the "slowest." To understand how San Angelo accommodates these individual differences, one must visualize how they have been handled in the past.

In chart I, the series of dots in the slanted bar represent students ranging from the fast to the slow. The circle represents the target group at whom education was aimed in the early 1900's. Only 4% of all students who started school were graduated from high school at that time. The total curriculum, on a national basis, was designed to take care of the "fast." The top 4% were being trained for the professions. The aim and requirements for the other 96% were very simple: to be able to read and to write legibly. In the 1920's compulsory attendance was mandated and a very large percentage of students remained in school through ages 15 and 16. The larger the percentage that remained in high school, the lower the overall ability-level dropped. 18 to 20% graduated from high school. Chart II shows the new target for the curriculum. As a result of this broader base, the national curriculum was weakened, or reduced, and broadened so that more children would achieve a passing grade.

This "single rail" curriculum centered on the middle ability group. The fast pupil suffered unless he was inspired and challenged by an outstanding teacher. An effort was made to help the lowest, slowest group, as shown in Chart III, by installing a vocational program.

In this partially successful program were mixed truly retarded pupils as well as the "slow" average. It held these pupils until compulsory age was passed, but did little to meet their needs as productive citizens in a democratic society.

Dr. Wadzeck's program in San Angelo operates on the premise that the "buck-shot" technique aimed at the broad national average does not fulfill the needs of the

fastest and slowest pupils. As shown in Chart IV, three separate curricula, or "rails" are provided in every grade and in every subject area. The idea dictates that the lowest group needs the academic areas just as much as any other group in order to fulfill its responsibilities as voting citizens and as people who must make a living. As Dr. Wadzeck puts it, "This group needs to be able to speak, read, and write the English language. They need to go as far in arithmetic as possible because the people that employ them will require this skill."

At the same time, Wadzeck believes strongly that the fastest group must be stimulated to achieve to full capacity. He believes this must be done with a highly-developed and well-organized curriculum, and he avoids the use of the term "enrichment" as a catch-all that should not be substituted for a truly structured program for the gifted. He looks forward to a program of acceleration so that a highly gifted student may master this program in a shorter time than 12 years.

The details of this intricate three-rail program will be found in the following interview.

Q *Mr. Wadzeck, before we go into the details of your three rail curriculum program, we'd like to ask you about the philosophy behind it. What's the thinking—what motivates this new approach?*

WADZECK: As you know, this nation mandates equal opportunity for all. We believe this has been misinterpreted by some educators who have substituted the word "same" for the word "equal." All children are not the "same." In other words, a fast child being held back to work with the normal-speed child certainly is not getting "equal" opportunity. He is not developing his abilities. In San Angelo, we try to live by the philosophy that equal opportunity for all means equal opportunity to develop their natural abilities to the maximum.

Q. Isn't that the idea behind the curriculum in most good schools—a highly enriched program for the bright child and a vocationally-oriented program for the slow?

WADZECK: That's where we differ. We believe—and we think there is good evidence to support the fact—that all people, even the slow, need a good fundamental education in the fundamental areas. We try to keep our total educational program *academically* centered, with just a few courses at the bottom which a lot of people think of as vocational. In other words, we put different courses on different levels of instruction, according to the ability of the child.

Q. Then you don't believe that the slower child should be given vocational training—taught a trade. You feel a slow child can "achieve" in an academic program?

WADZECK: We think a slow child can learn almost anything if he is given enough time. Moreover, we find that the people who employ these children want them to speak good English, to know a certain amount of math, and have accuracy and neatness in handling it. We believe these children need to know everything that any other child knows about our country and what makes it strong, and about the history of other nations. Remember, we are a people who govern ourselves—and a sizeable percentage of our citizens are in the lower ability groups. We don't want them to vote us into any of the "isms."

Q. If I understand you correctly, you are saying that you do not believe in vocational education and that possibly vocational education should be removed from the public schools. Is that correct?

WADZECK: I have apparently left the wrong impression. I do believe in some vocational education but not an overbalancing of vocational or snap courses. We have what we consider to be a strong vocational program. It has a very definite place in the total curriculum. My point is that vocational education is not necessarily for the slow child. Many of our fastest students would do well to have four subjects in heavy academic fields with one course in vocations; such as, home and family life education for girls, and typing, shorthand, bookkeeping, etc. What I am drastically opposed to are the little gimmick courses that are dubbed vocational courses. Vocational courses should not be something for a snap or a get by course but something to serve a real purpose. Let me re-emphasize, we need an academically-centered program geared to the ability of the child—with some realistic vocational subjects.

Q *Many educators would probably agree with you, but we've heard many of them say, "We've got to have 'escape' courses for our slower children to give them a sense of achievement where they can achieve." Does that sound valid to you?*

WADZECK: I believe some of your statements to be correct. But I believe the term "escape courses" is a ridiculous one to be used by an educator. Children do need courses that allow them to achieve to their

maximum. We try to do that by having three levels of instruction, but we would seriously resent our third rail level being named escape courses. Some children simply do not have the ability to cope with higher math. This can be controlled by seeing that a child does master one course in math before moving to a higher level. Some children may spend their full 12 years mastering math through eighth grade level. If you were employing a boy as a stock clerk in your business, would you prefer one who had been exposed to all levels of math but was not capable of passing any of the courses with reasonable mastery, or would you prefer a boy who could handle figures by listing them neatly and could add and subtract with accuracy but had never had a course in plane geometry, trigonometry or calculus?

Q *How early in your academic program are you able to start the three rail curriculum?*

WADZECK: We start all of our children in one group at the beginning of first grade, and we carry them through a testing period to explore their readiness for an academic program. We need to recognize that children grow at different rates of speed. Some children enrolling in the first grade have a biological age of four or five years. Most boys are six months behind girls in their physical growth. Such children are simply not ready for an academic experience. Their finger dexterity has not developed sufficiently, eyes do not focus properly and many other points of physical growth are retarded. These children are too often labeled as members of the low intellectual group when, if given a little time, they may be above-average or even in the gifted intellectual group. We give a series of tests and observe the children. If they are ready for an academic experience they are moved into academic work. If they are not ready, we use a glorified kindergarten application of readiness for a short period and re-test. We continue this process until all children move off into an academic program, and at this starting point, you will see the three rails develop in a very natural way. Some of our children develop readiness late in the year and do not have sufficient time to cover the work required in the first grade. By educational terminology these children fail. We probably have more retentions in the first grade than any school in the nation, but I assure you these children have not failed. Next year they start with the fast group, and in many cases hold this level.

Q. What happens at the end of the first year? How many are retained?

WADZECK: The number of retentions varies from room to room but, system-wise, approximately 25 to 50% of the third group cannot maintain achievement with this group but are carried along for a period of time to be sure of our appraisal. The child who is to be retained is normally identified not later than February of any school year. Parents are contacted and are given an opportunity to observe. In a large majority of cases, the parent can see the need for retention. However, I can assure you that any problem that arises from this program is not a child problem but is a problem of consoling a parent. This constitutes the greatest weakness in our nation's schools. We have had a program of automatic promotion in the past. If a normal child is held up immediately, and has the proper foundation, he will not have too much trouble in the future. If this child is automatically promoted, he is unable to do second grade work and drops further behind and by the fourth or fifth grade, we have a candidate for a psychiatrist or a psychologist—a very disturbed child. The greatest problem here is the inability or lack of effort on the part of the educator to fully explain to the parent that at this stage we are not talking about intellect. We are simply dealing with a physical growth pattern that is moving slower than normal. Very few parents would require a small child to carry a 50 pound weight if they were aware that carrying the weight would injure the body physically. But this same parent may insist on a mental challenge that would injure the child just as much as the physical weight.

Q. Mr. Wadzeck, at what grade level do you feel a child has pretty well established, to your people, what his true ability level will be?

WADZECK: By the third grade. We have a major check point then. We test first graders and third graders on I.Q. In many cases, we have found a gain of from 10 to 25 points in I.Q. tests in those grades. I think you can see that this is not a very reliable test at the first grade level.

Q. You don't believe in I.Q. tests?

WADZECK: We believe they are not reliable in first grade. Early testing is a detailed, individual thing that we can't handle in mass education. This should come as no surprise. Some children walk earlier than others, some talk earlier, some lose their baby teeth earlier. We are looking for maturity, the biological age of the child. The fact is that we know more about horses by looking in their mouths than we know about our kids and their biological age.

Q *What happens in second grade? What do you do group-wise with the second graders?*

WADZECK: We have approximately two weeks of review of first grade work. Then we have a week of testing to determine whether the child has lost or gained during the summer months. If he has lost, we put him in a group that goes back over the last year's work to be sure that we have the foundation soundly built in the early grades. This is the key to our program. We find that some children gain in the summer and can move to a higher rail. Others lose as much as 30%. A whole lot depends on the home environment—whether or not the child is exposed to some academic

feel that it is a mistake to withhold things about their children."

work in the summer, like reading or playing with numbers.

Q. Then it is conceivable that a child who was in the highest group his first year might drop to the second rail in second grade?

WADZECK: That is correct. But it's usually temporary. He should move up by the end of the second year.

Q. When second grade starts, hasn't your third rail—your lowest group—been decimated by retentions? If you are going to continue on three rails, wouldn't you automatically have to downgrade some children?

WADZECK: The third group in the second grade is generally smaller than the third group in the first grade. We would normally retain 25 to 50% of this group. You will have a lesser number who will be down graded to the third group. I think this would be a good time to make a major point. Our faculty understands that we are not talking about any kind of a curve. It is not necessary that you have any given number in a given rail. We place the child where he belongs and try to move him as fast as he can achieve. As a result of such flexibility, you may find some rooms with 20 children in one rail and five each in the other two, or eight and two in the other two rails.

Q. Do the parents know in what group their child has been placed?

WADZECK: This is described to the parents in our grading system. The parents know and can have a conference with a teacher at any time to see if they agree with the placement of the child. We feel that it is a mistake that we educators should try to withhold things from the parents about their child.

Q *You mentioned a "grading system." Do children in your primary school get actual marks?*

WADZECK: The first grade child does not receive a report card for the first six week program. This is normally handled by a visit from the teacher in the home—a parent conference—to describe to the parents the problem of the child so far as his maturity or readiness is concerned. We try to point out to the parents what they might do to help the child in some way to grow a little faster in our readiness program. After the first six weeks, we introduce an A-B-C-D-F marking system.

Q. The standard system, in other words?

WADZECK: Not quite. The original ABC system indicated a "percentage of achievement." We do not feel that a child can learn a percentage of his multiplication tables and be successful in math in the higher grades. Our total program in the first six grades is based on the highest rail. This is done primarily because every child is a potential member of the top rail. So, we have added to achievement what we call the "progress" of the child. In the first rail, a child who is mastering the program at a high level of efficiency is graded A. If his progress is that of the first rail but he is dropping down slightly in his achievement, his grade would be B. If his achievement drops lower, he would be moved back to the second rail. A child in the second rail may be achieving at second rail level but his progress is behind the first group and his highest grade level is B. This means he is reaching high efficiency but is behind in progress. If his progress increases, he would be moved to the top group. The third rail is considerably behind in progress. If a child is achieving at high efficiency at this point, his grade would be C. If he is achieving at a lower level, he would make F, meaning that he should be retained. If he has been retained in the grade previously, he would be marked D. This system is maintained throughout the first six grades. In the secondary schools, each course is based on its own standard and a child could make A, B or C, in any course depending on his achievement.

Q. Does that mean that your grading on the traditional ABC is for higher quality than the traditional ABC?

WADZECK: Remember that our middle group is the national curriculum. Since each child is graded on a higher quality program than this, I think it would be fair to say that it is considerably harder to make high grades in San Angelo schools than in many other school systems.

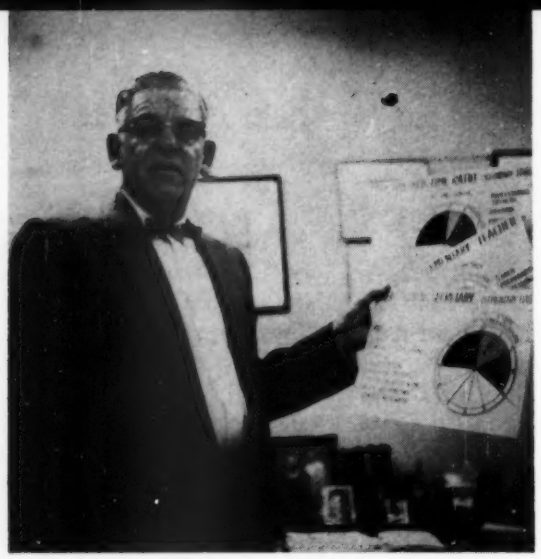
Q *Do you have a formal curriculum established for each rail in all grades?*

WADZECK: It isn't formal and it isn't complete. The entire program is constantly undergoing change in an attempt to tighten for higher quality. All teacher-guides and materials on this program are marked *tentative* at the present time. Considerable work must be done before the program can be released in finished form as a real answer to our educational problem. We are probing for better answers on how to teach children more efficiently. We feel that, in a general way, we have a very acceptable pattern and in a few more years should have something in a more finished form.

Q. In other words, you have a general framework to tie each grade together without over-lapping. You don't accelerate the child into the next year's work?

WADZECK: Basically, that is correct. I am sure that you will find a lot of lay people and some educators who will differ with us, but we feel that quality must be improved before acceleration is applied. We simply recognize that the adult of the future must have a tremendous increase in knowledge over what is needed in the world today. I am sure that our program will include acceleration at a later date, but not at the present time.

Q. Could you take a single subject—mathematics, for example—and



"Some people try to provide a program in math for the fast child by giving him more problems. This is about like having him write his name 100 times."

tell us what you do for a child in the top rail who has finished his basic work half-way through the year?

WADZECK: We handle these movements in six week chunks. In mathematics, he must go through the drill section, learning the multiplication tables, or addition, or subtraction, or whatever it may be. If he can go beyond that in the six-week period, we give him work that makes him take the knowledge that he has acquired and apply it. We give him more quality, not quantity. I think this is a good place to explain one point that we have found which is contrary to what the average educator might think—especially general education people. The fast child may only have to do two or three problems to thoroughly understand a point in mathematics. The average child might need to do four to six problems, depending on the standard. The slow child might have to do 10 or 12 problems. Some people try to provide a better program in math for the fast child by just giving him more problems. This is about like having him write his name a hundred times. On the other hand, some courses work just the opposite. In the field of reading, or languages, *quantity* makes for quality. In math and science, that is not true.

Q *Let's go back to your grading system for a moment. A lot of educators say that it isn't fair to a child to give him a C if he is really working to the top level of his ability.*

They say it is frustrating. They believe a child should be marked on the basis of his own ability level. How do you feel about that?

WADZECK: We think that the most injustice can be created by trying to fool the child into thinking that he has abilities that he doesn't have. We think he should be graded competitively—he will make his living that way. We try to determine a child's outstanding abilities and point to them so that they may develop more in that field. In other words, we think it is better to teach a child within his abilities so that he can develop his strong points to the utmost.

Q. You must use a pretty strict sense of values then in grading the top rail child.

WADZECK: I can give you one very simple example. We have spelling every day. We have some pretty good spellers. If a child does not miss a word in the first four days of the week, he gets an opportunity to take all of those words on Friday. If he doesn't miss any words on Friday, he makes a 100 that week. If he misses more than three or four words within the six week period, he is in a B group.

Q. How would you apply that system to the second rail?

WADZECK: The second rail child's *progress* would be behind that of the first rail. In other words, he would be spelling words that the first rail child had already mastered. If he was spelling at a high level, similar to the first rail, he would receive B. If he held this level for a period of time, an effort will be made to pull him up with the first rail child—change him to the first rail.

Q. Does your program continue along the lines described all through the first six grades?

WADZECK: Our program takes on a very definite change in several places. The first three grades provide a major checkpoint. At this point, we provide for an extra year for balancing any time the child needs, whether it is in the first grade or at the end of the third grade. Every child must attain a certain standard of achievement before he moves into fourth grade, which provides a more comprehensive program in every way.

Q *Why do you use fourth grade as your first breaking point rather than some other?*

WADZECK: This is where a child starts using tools that he has accumulated in the first three grades—reading, for example. In addition, I think he has developed his maturity so that we can pretty well write off chronological age and have a more dependable picture of his ability through a testing program.

Q. In the first three grades, according to what you have said, there is considerable movement back and forth between rails by your children. Does that start to abate from fourth grade on?

WADZECK: It begins to settle down in fourth, fifth, and sixth. There is still movement—mostly caused by things in the child's personal life, perhaps some disturbance in his home. But, basically, we are jug-

gling to find the real ability of the child in the first three grades.

Q. How does the program change at this point?

WADZECK: The three rails are condensed into two rails. The third rail practically disappears. A completely new rail is established as rail number one. I could express it this way: The old second rail becomes the third rail, the first rail becomes the second rail, and a strong enrichment program designed to center on the child's initiative is introduced. We call it an exploratory program.

Q. What do you mean by this term "exploratory?"

WADZECK: In mass education, where you teach 30 to 100 kids at a time, it is almost impossible for a teacher to touch the individual interest of the child. This exploratory program is designed to stimulate the first rail children. The way it works is very simple. As the middle group goes through the major curriculum, the first rail child has the ability and interest to go deeper into many subject areas. If he is questioning the teacher on a particular area, and is eligible for exploratory top rail work, he may ask to take this area as an exploratory project. The work is individual thinking and individually developed by the child. The teacher assists by giving the child information or suggesting where he may find reference materials or examples within the community that he may investigate for further information. The results of this program are remarkable. It teaches the child how to work independently, outside of school hours, to seek knowledge beyond the ability of the average child. It really teaches the child how to work independently, outside of school hours, to seek knowledge beyond the ability of the average child. It really teaches the child independent study, and how to study.

Q Is the child aware that he is supposed to explore? Do you brief him on this point?

WADZECK: We prepare them for this in third grade. Each child is led off by the teacher into his or her interest areas, and he is made to understand that this exploration will be part of his program in fourth grade. It would amaze you how far they carry this. For example, a child that can do his normal school work can actually carry on considerable research and study in the field of science, for example, if he is encouraged. But I'd like to remind you of one thing so there will be no misunderstanding. Before a child goes into this program, he has mastered the basic curriculum and he has also mastered the enrichment program. This is an added level. It is only for the top rail child.

Q. How do you handle different levels of ability in different subjects? Let's take this situation: The child is extremely able in English, but he is having difficulty with mathematics. Would that child be permitted to do enrichment and exploratory work? In other words, would he still be in the first rail, if he was falling behind in math?

WADZECK: Let's clear this up. A child may be in the top rail in English and in the second rail in mathematics. In the areas where he has not mastered the basic tools, he would not do exploratory work. He could do exploratory work in subjects where he excelled.

Q. In other words, you do not group your classes homogeneously. Each class is just a mass of 30 children, and they are grouped by rails in subject areas within that single classroom.

WADZECK: That is correct. We group within the classroom.

Q Don't you believe in homogenous grouping by classes in the primary or elementary level?

WADZECK: We feel that, later on, there may be some slight grouping done—very general grouping in fourth, fifth and sixth. Actually, our grouping is based on proven ability. We think that fits with the American way of life. We have children of high potential who simply will not work. They are like thoroughbred horses that will not run. We try to find out why, and remove the deficiency, but we certainly do not enter them in a race until they're ready.

Q. Do you continue your testing program in fourth, fifth and sixth?

WADZECK: We are running a rather extensive testing program in all grades. However, we certainly don't think that it is adequate. We think Lawrence Derthick's recommendation that our schools need counselors at the elementary level who can do a more thorough job in testing the child in his abilities and encouraging him, is what we need.

Q. You must have a very high ratio

GRADING METHOD

In a Rail one course, a student can be marked only A or B, (see story for details). If he makes a B he is a potential for reduction to Rail two in that subject. A Rail two student can make B or C. If his mark is C he is a candidate for Rail three. A grade of B means he is a potential for Rail one. In single rail courses, the child is graded from A to F by his actual achievement.

SINGLE RAIL

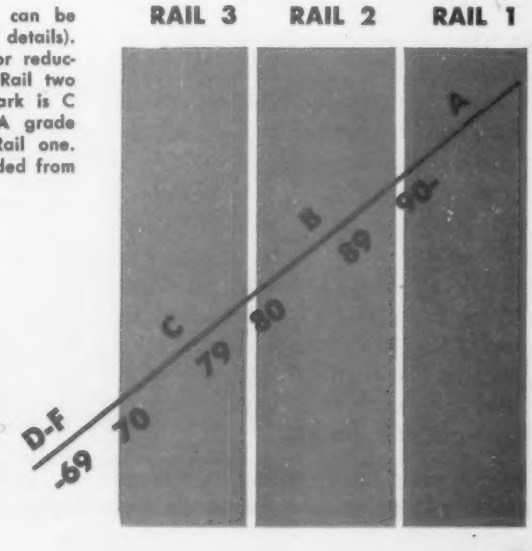
A 90-100

B 80-89

C 70-79

D Repeating & below 69

F 69-



of guidance people as compared with the average school district.

WADZECK: Actually, we are doing a large percentage of our work with classroom teachers and central office coordinators. We have only two people who can be typed as "general" testing personnel. In the school system, we do have two counselors in junior high and two in high school.

Q *Is there a long time lag between the time that the child takes his test and the time that the teacher gets results?*

WADZECK: No, we have a fairly rapid system. Incidentally, we are doing something very interesting. We have found, on various tests, that children will vary in their ability to handle them under different teachers. We are playing with an idea of putting all of our tests—the instructions for them—on tape recordings. We give a little training program on the tape to get the child ready. Then, one person whom we consider to be very good in explaining and who has a good voice, is selected to describe the test, the materials the children need, and how it will be run. The tape tells them when to start. With this method, we have a controlled situation on every child throughout the school system. In addition, it saves the classroom teacher's time. We are hoping to develop this extensively in our program.

Q. One more question about your primary and elementary grades. If a class starts with 30 students in first grade, does the same group remain together all through their first three or six years of school, or do you break them up at the end of each year?

WADZECK: A lot of parents, and educators, think that the same children should stay together. We do not. We feel that it adds to the growth of a child if he keeps meeting and working with new people.

Q. In your re-grouping, do you make an effort to get a decent balance of first, second, and third rail children in each class?

WADZECK: Originally we didn't. One teacher might have 75% of her children in the fast group. Or she might have a balanced situation. We are now studying the idea of placing children. In other words, if we have 90 students in one grade, which means three classes of 30, we try to put all the top achievers in one class and so on down the line.

Q. Then you are going toward homogeneous groupings by classes?

WADZECK: Possibly. In general, we are simply working for a more efficient way to handle and teach children.

Q. Do you make any effort, Mr. Wadzeck, to put certain difficult children with strong teachers when making class assignments?

WADZECK: About the only spotting of children we do is in recognition that there can be personality conflicts between a child and an adult—just as it can happen between two adults. These conflicts are decided by the central office and the principal of the building. After all, children are our business. We wouldn't hesitate to move a child if there was a real conflict, but we would fight to the death moving a child as a result of a personality conflict between parent and teacher.

Q. Earlier you mentioned something about an acceleration program. Do you permit children to skip grades?

WADZECK: Not in the first grades. If we had a system-wide kindergarten program, I think we would have some small percentage of our six-year-olds ready to take the first three grades in two years. We have a projected program to select some of our fast third-grade pupils who are idling in our fastest groups. They will be pulled out of the regular curriculum and do the fourth, fifth and sixth years in two years under one teacher. These children should gain a grade for "balancing". We would rather use the term "balance" than "acceleration". But remember —unlike the child who has skipped a grade, these children cover the whole basic program. There are no gaps in their education.

Q. I realize we haven't covered your junior and senior high school programs yet, but could you tell me if you permit speed-up there?

WADZECK: We are also projecting some advanced study in the junior high and high school. A child with high achievement in math would be placed in algebra I in the eighth grade. A child extremely advanced in science might take our ninth grade general science in the eighth grade. In high school this would work in a very similar manner by having the more capable cover their high school work in a given subject more rapidly so that they can take college level work in their senior year. These children would be tested by the college for placement and be placed on sophomore or junior level in college if the test results permitted.

Q. In other words, you aren't accelerating. You're permitting a child to fully develop his special skills in certain subject areas.

WADZECK: Yes, that's about it.

Q *What happens to your rail system when you strike seventh grade?*

WADZECK: In the first six grades, you must remember, we teach all levels in one room. When the children move into the seventh grade, there is an extensive orientation program between the sixth-grade teachers and the junior high school counselors. A child is guided into registering for the level of work he is capable of doing. In other words, we now begin to rail whole classes by the level of their achievement. We advise the children, but the child actually registers for the levels of work he feels he is capable of doing.

Q. Then the child can actually select his own level?

WADZECK: Within certain limitations. If the child and his parents feel that he is capable of doing the top rail when we have recommended that he should take the middle rail,

and working with new people."

How Wadzeck explains San Angelo's three rail curriculum

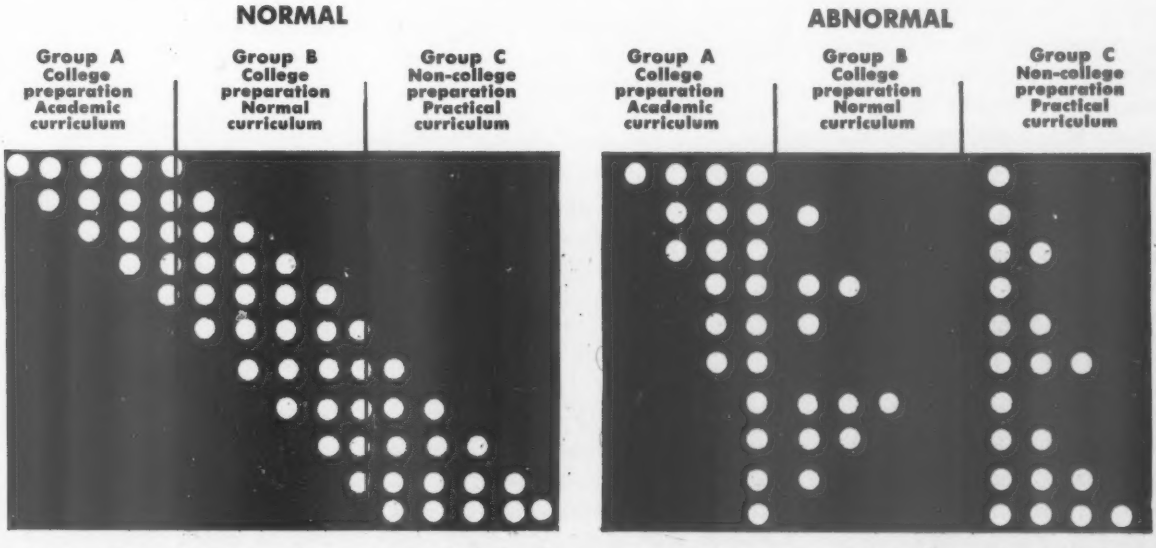
■ *In the San Angelo system, a child's proven abilities in a given academic subject determine which curriculum he takes in that subject. It is quite possible for a child taking five courses to take the first rail in some subjects, the second in others, and the third rail in still others. The charts below illustrate this point.*

In the first chart, we see some fairly normal situations. The dots represent subjects being taken. The third line, for example, shows a child taking three first rail subjects and two in the second rail. The line that is "boxed" shows a child taking two second rail and three third rail courses. A child taking this grouping, or any level below it, is not potential college material. We try to meet his terminal needs in high school.

In the second chart we see some of the abnormal variations in achievement, and how they affect a child's program. On the second line, we find a child who is strong in three subject areas. He is taking the fast curriculum in these three. He's somewhat weaker in another subject, so he's taking the second rail in that course. We have many very bright girls taking second rail math, for example. In addition, he's taking a third rail course—probably a subject like shop which is given only in one rail, and which he has elected for hobby purposes. We give many single rail courses in the "vocational" areas. Others, like Latin and physics, are taught in only one rail. Chemistry, on the other hand, is taught in two rails: top rail for the very fast and for those who are planning to be engineers or scientists, and second rail for children who need it for college entrance. Children who cannot pass the second rail (national curriculum) should not take chemistry.

The fourth line shows a not-uncommon situation. The child is good in science and math. He is not as good in English and social studies. The important thing here is that we are driving or stimulating him to the utmost in the subjects where he shows talent. He gets the standard national curriculum in the others.

POSSIBLE SOLID COURSE VARIATIONS BASED ON INDIVIDUAL STUDENT ACHIEVEMENT


NORMAL
Group A College preparation Academic curriculum
Group B College preparation Normal curriculum
Group C Non-college preparation Practical curriculum
ABNORMAL
Group A College preparation Academic curriculum
Group B College preparation Normal curriculum
Group C Non-college preparation Practical curriculum

**Students completing this program for a minimum total of eight properly selected courses may meet college entrance requirements*

we have no hesitancy at all in saying, "Okay. If you feel you can do it, we'll let you try." But we don't allow such students to hold back the rest of the class. If the child cannot carry the work in proportion to the other members of the class—in other words, if he drops down to his grade level—he is automatically, at the end of six or eight weeks, dropped back to the second curriculum for that particular course.

Q *Do all of your courses have various rails or various ability levels?*

WADZECK: No. We are in the early stage of developing the rail system in the secondary courses. I doubt whether more than 50% will be railed. Some courses do not lend themselves to separate rail instruction. A good example of that would be Latin. The same is true of some vocational subjects—there is no sense in having separate rails. We call these courses single rail courses. The way we determine whether a course should be railed or not is based on experience. If a teacher is teaching a given subject and finds that some students are doing the work ably, and some are not able to keep up with the group, then we suggest that she discuss the problem with other teachers in that particular subject area. If they agree with her, then we give them additional help from curriculum people to work out the two or three rails that are necessary to teach this particular subject. As a result of our experience, approximately 50% of the secondary courses will be railed into three rails and approximately 50% will be single courses.

Q. What about the child who wants to take courses beneath his ability level?

WADZECK: We have encountered very few cases like that. It usually works in reverse. That is contrary to many things you read in the papers about our youth today. It is one reason why I believe that if you give children credit for doing more, they will step up like little men and women and take on the toughest. Our greatest problem is the child who tries to take courses in the highest rail, and is unable to move fast enough.

Q. Do you have different high school programs, such as a purely academic program, a general terminal program, anything of that type?

WADZECK: We are a little bit old-fashioned on our requirements for graduation. For example, in our school we require four years of English, of everybody—even the slow student. In other words, we think he needs all the English we can give him. We require one year of government for every child that graduates from our school. But we definitely do have some of the breakdown that you are talking about. In other words, some children concentrate on a highly academic program —four years of English, four to five years of math, four to five years of science, four in language, and so forth. Others will take part of those courses and will go in more for courses in speech, art or subjects like that.

Q. Do you give different types of diplomas?

WADZECK: We use the same type of diploma for all children, but the transcript carries the different rails in grades and subjects and recommendations.

Q. Then the grading system is constant throughout? A child in the second rail can't get an A.

WADZECK: No. Each course in the seventh grade through the 12th is graded individually against the standard course. A child in the third rail course *can* make an A, but his course is designated as Rail 3 English. The college admissions officers recognize this, and so do employers.

Q. Do you permit top rail students to take additional subjects, more subjects than second and third rail?

WADZECK: Any child that can average B we allow to take five subjects—five academic subjects, plus physical education, or four academics, a fifth in vocational, and physical education.

Q. That sounds a little inconsistent considering the fact that the child is being pressed by the very fact that he is in first rail.

WADZECK: To be very honest with you, I think we have about 10% of our students who can take five heavy academics in the top rail. Others can take four subjects in the top rail, then drop into a second rail course for one. Others might take two subjects in the top rail and three in second or third rail work.

Q *You say that your students take four basic academic subjects, plus physical education. That makes five. This elective extra course, can that be in an academic area?*

WADZECK: Yes. A child can take five heavy academics, or he may elect to take a single rail course in music or art or shop. Many of our better students want some shop work, more for hobby purposes than other things. Incidentally, this is off the subject, but we are beginning to think that some of our subjects should be taught six hours a week and some should be taught four. We feel that we may have provided one hour for all subjects for the convenience of the administration. We are studying the possibility of establishing modulations of thirty minutes instead of an hour and the possibility of offering some subjects two hours per day on Mondays, Wednesdays, and Fridays and other subjects two hours, Tuesdays and Thursdays. I believe that you will find that one hour for every course is considered a real road-block by practically all educators. We are all hoping to find better answers in scheduling for more realistic application to this problem. In trying to make any changes we recognize that it will be slow because accrediting agencies have spelled out the number of hours and minutes the subject should be taught for credit. In many cases throughout the nation,

we would find that any change would violate established laws.

Q *What is your policy on homework, Mr. Wadzeck? Do you assign a great deal?*

WADZECK: We try to get our teachers to be very systematic about homework. We try not to assign it on week-ends, because we think that belongs to the family. On the other hand, we are finding that the week-end is the time when a lot of exploratory work is done—when the parents are there. One of our junior high school students recently did a survey on the subject. He found that about 10% of our students in the secondary school felt that we didn't give quite enough homework, about 80% felt it was just about right and about 10% felt that we were a little bit too heavy on it.

Q. Do you have homework assignments in the first six grades?

WADZECK: Yes. The top rails have a little more, but I doubt if they spend any more time doing it. I guess they spend about an hour to one and a half hours each night on homework.

Q. Do you use study halls in your high school?

WADZECK: Yes. We have talked to many people who have tried to eliminate the study hall. They have found that they couldn't do without it. We feel you can if you have planned programs for the child to supplement the study hall. In our new high school, which will be finished next September, we are planning to provide an open library for approximately four to six hours more than our regular academic program operates. With that program, we hope to say to our student, "We won't hold your hands in the study hall. You have two to four hours you can use in the libraries, or the science labs, or other places in the school." We will have the facilities, and we hope our students con meet such a change to improve their study habits.

Q. We hear a lot of talk these days about the inadequacy of the American science program. Are you doing anything special here to provide for science and mathematics?

WADZECK: Yes, for several years we have taught science in the first six grades, with six levels of science in secondary schools. The last two years, in secondary schools, are elective. About two years before Sputnik, we decided that the program was not adequate and completely reworked our elementary science program. In our elementary schools we have movable science laboratories with considerable equipment and aids for the teachers. We are in the process of developing some of our high school science on different levels or rails. For example, biology and chemistry on a national rail and the honor rail. Any arrangement for third rail would be specifically designed for the needs of the child.

Q. Are you finding it difficult to carry on advanced science or math work because of the shortage of teachers in this field?

WADZECK: This is a difficult question to answer. Yes, we are having some difficulty in finding the quality personnel we would like to have. We are not having as great a problem as most schools because we are providing some better salaries by using our outstanding people as consultants to elementary teachers and to work in our curriculum department program in the summer. Most of these people will work on a 12-months contract after this year, i.e., a year's program of regular teaching, summer school enrichment and remedial work plus consultation work to the teachers and administration.

Q. You have a local junior college. Have you developed any reciprocity with it on advanced work for your very bright juniors and seniors in the high school?

WADZECK: Yes. The junior college is now operating on two levels of instruction. They say it is necessary to operate that way to accommodate some of our students in their school. Our top rail people are much better prepared than the average student coming into their college.

Q. I think the logical way to terminate this interview, Mr. Wadzeck, would be to say, "What's the product you've produced?" Can you measure improvement in quality?

WADZECK: It depends upon your yardstick. This last year our highest graduate received an appointment to the Air Academy. He did not take the competitive exams. The second highest graduate received a scholarship at MIT on his math achievements. Our third ranking graduate received one of the National Merit Awards. We had five in the finals, which is remarkable for a high school of our size. I do not feel that a true measure can be applied to the program until some of our students in the lower grades graduate from high school. In the field of education, it is hard to show immediate results. We are intentionally moving slowly. We know that we are not hurting any child and the standard of achievement is gradually improving. This program is in its infancy and we will need several years for it to grow to full manhood.

Q *Mr. Wadzeck, do you feel that you have advanced far enough to provide materials or assist other schools that want to use such a program?*

WADZECK: We do not have materials to mail out. We have considerable work to do before our curriculum could be in an acceptable stage for other schools. We do have many visitors and several schools are preparing to start or are in the beginning stages of such a program. The general program is all that we have to offer because the details of the program are being changed for improvement almost daily. The Fund for the Advancement of Education has assisted us, to some extent, financially. They have done this to give us an opportunity to move the program faster in the hope that it may provide some assistance to other schools that are facing this age-old problem of what to do with the very fast and slow in our system of national education. **End**

Problem Child?..or HEARING PROBLEM CHILD

Many a "problem child" may be just a child who can't hear. But did you know that this child may be very "expensive" to your school? His failure to hear properly may mean failure in his class. And repeating a grade is very costly to your school.

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At least 3,000,000 children suffer from some kind of hearing defect. That means 5% to 7% in any school. In a classroom of 35, therefore, 2 pupils may have hearing problems which require attention. It's so easy and economical to start a Maico program to determine which children are hard of hearing. The cost is actually less than one student in your school repeating a grade. After completing the tests, simple steps are recommended to aid the students who have a hearing defect.

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HEARING SCIENCE ADVANCES THROUGH MAICO RESEARCH

(For more information, see last page)

How Indianapolis schools work with local business

In our nationwide examination of cooperation between businessmen and educators, SM found this striking example of mutual aid. It is simple, direct, and highly effective, and the value of its impact goes far beyond its comparatively low cost.

Where's Daddy going?
Out.
Out where?
Out to work.
What's that?

■ ■ ■ To answer this question intelligently, the Indianapolis school system budgets $7,500 each year (see box), plus salaries for a director and his secretary.

What the director directs is a simple, but highly effective program labeled "Indianapolis at Work." Focal point of the plan is a series of publications, each examining a different phase of Indianapolis' economic life. Printed in quantity and distributed to the schools for use in social studies classes, the Indianapolis at Work booklets bring economics and the private enterprise system vividly to life. They explain just what role a man's work plays in businesses, banks, stores and factories in Indianapolis and in the national and world economy.

How it started

In 1951 Dr. H. L. Shibler became general superintendent of the Indianapolis public school system. He brought with him a conviction that more and better teaching methods were needed to acquaint students with the economics of the world around them. In examining the school curriculum Dr. Shibler found that information and material on Indianapolis business and commerce was almost totally lacking. For example, there was no medium for publishing current data about local business and industry. There was no organized method for presenting job opportunity information

WHERE THE MONEY COMES FROM

For the first three years the Indianapolis at Work program was underwritten by a fund pledged by some 40 industrial groups and civic leaders through the Indianapolis Chamber of Commerce. Annual contributions ranged from $100 to $300 per firm. At the end of the three year period representatives of the Advisory committee appeared before the citizens' school budget committee and requested that the cost of the operation be incorporated into the regular school budget. The request was approved. Following is a typical annual budget, exclusive of the director's and secretarial salaries:

Setting copy and printing five issues at $130	$650
Negatives, plates and stripping five issues at $135	675
Summer reprinting of 26 back issues	750
800 reams of paper at $4.80	3,840
Reprinting special printing issue, 20,000	500
Reprinting cover brochure, 5,000	220
Ink and other printing supplies	600
Miscellaneous expenses	265
TOTAL	$7,500

to high school students. There was no attempt being made to relate Indianapolis' business operations to national or international trade and commerce.

With the approval of the board of school commissioners, Dr. Shibler went to the business community and recruited an advisory committee for the projected Indianapolis at Work program.

This committee, composed of approximately 30 men and women, was made up of the leaders of business, industry, labor, the press, education, and parents' groups. The editors of the city's three newspapers, the citywide head of the PTA, and presidents, vice-presidents and managers of business concerns, gave the committee the stamp of authority.

To coordinate the project, as well as to research and write each publication, Willard J. Gambold was retained as director. Gambold organized an editorial committee of teachers, principals and curriculum supervisors to evaluate copy and assist in interpreting the program to the regular school teachers.

Preparation of a story

Initially the advisory committee listed 60 local industries and operations which would lend themselves to Indianapolis at Work story treatment. From this list of suggested topics, ideas are developed for actual publication.

One idea that was suggested was "Indianapolis and World Trade." Here's how the idea was developed:

Letters were sent to several people in Indianapolis involved in the import-export business. They were told about the project and asked to serve on an industry committee to furnish materials and information for the world trade booklet. Some of the people who actually served on that committee included:

The export-import manager of a large machinery company

A pharmaceutical importer

The head of the foreign buyers group of a large department store

The assistant collector of customs

The foreign credit manager of a downtown bank

The head of the foreign trade division of the Indianapolis Chamber of Commerce

At their first meeting, the industry committee discussed the general nature of the issue and blocked out the major divisions of the proposed booklet. Each of the members furnished information to Director Gambold relative to his own particular role in international trade. As this information came in, Gambold wrote a first draft of the article. This was mimeographed and sent to every member of both the advisory and editorial committees, as well as to members of the world trade industry committee.

The final draft, incorporating many suggestions made by the com-

WHAT THEY'RE ABOUT

The Indianapolis at Work issues range from a four-page, black-and-white, story on foundries to an impressive eight-page color booklet on printing.
Here is a list of the 29 titles that have already been published:

1. Our Biggest Show (**Department Stores**)
2. You and Your Bank (**Banking**)
3. Communication is Big Business (**Telephone Company**)
4. So That We May Know (**Newspapers**)
5. This Important, Skillful, Profitable Art (**Foundries**)
6. Guardians of Our Dollars (**Insurance**)
7. How We Build Our City (**Construction**)
8. Food for Everyone (**Foods**)
9. How We Buy (**Consumer Credit**)
10. The Coal to Give Us Power (**Coal Mining**)
11. Making Medicines for Better Health (**Pharmaceuticals**)
12. More Power to You (**Electric Utility**)
13. From Idea to Print With Rollo (**Printing**)
14. Taken for Granted (**Gas Utility**)
15. Meat to Feed You Better (**Stockyards-Meat Packing**)
16. The Age of Miracles (**Electronics**)
17. They Bake Our Daily Bread (**Bakeries**)
18. Your Dairy Industry
19. Our Department Stores (**Revised Edition**)
20. Our Water Company
21. Modern Advertising
22. Money at Work (**Investments**)
23. Schools at Work
24. Our Telephone Company (**Revised Edition**)
25. Indianapolis and World Trade
26. Our Largest Industry (**Allison**)
27. Oil from the Ground to You (**Petroleum**)
28. Salesmen at Work (**Salesmanship**)
29. Books—from Ideas to Covers

In production now is one additional story, Number 30, on real estate.
One booklet that caused more than its share of discussion was Number 23, "Schools at Work." Said one official: "Normally, we teach them about everything except the vital mission of the public schools. In Indianapolis we want the students to know their schools." "Schools at Work" discusses increasing enrollment, the problems of teachers, curriculum, special school services, school planning, maintenance and administration. It points up how much it costs to operate a large city school system. Pupils at both the eighth and 12th grade levels are studying this booklet. The "Schools at Work" issue is also being used as a guide by Future Teachers of America clubs and by cadet teachers before they are assigned to the Indianapolis city schools.

mittee members, was then prepared. Pictures and line drawings, portraying the various operations covered in the text, were added and the final copy was sent to the printer.

Printing of all the issues is done by offset at the print shop of the Indianapolis Arsenal Technical School. The initial press run is generally for 10- to 20,000 copies. Personnel at the school print shop perform all printing operations with the exception of plate-making, which is done by commercial firms.

How it is used in class

The allocation of a story to a particular grade level is the responsibility of the teacher editorial committee. The world trade story, for example, was assigned to the 12th year social studies course in economic problems. Sufficient copies of the issue were sent to each of the eight Indianapolis high schools for every pupil enrolled in these classes.

Most of the stories are used in the social studies classes. The nature of the work covered in this area of the curriculum lends itself particularly well to the inclusion of the Indianapolis at Work publications. However, stories are sent to certain other departments. For example, several high school journalism teachers have requested the advertising story, entitled "Modern Advertising." Mathematics teachers have requested the story about banking, entitled "You and Your Bank." Business administration teachers have employed the "Money at Work" issue to study investments and the stock market. Some have arranged for local stock brokers to speak to students and others have arranged for classes to buy shares of stock.

Business use, too

While the Indianapolis at Work issues are primarily intended for school use, the project does a flourishing business in providing copies of the pamphlets in quantity to interested individuals and firms. Quite often a local industry will order copies of a specific issue for its own personnel or for visitors. The largest single order received was from the Allison Division of General Motors. When the Indianapolis at Work story on Allison (which is Indianapolis' largest employer) was completed, the company ordered 18,500 copies for distribution to its employees.

The Indianapolis program has already been operating for seven years. A significant number of local industries has already been profiled. Obviously both the educators and cooperating businessmen feel the program to have value, although that value is difficult to measure. Says Director Gambold: "If a greater appreciation of the American system and a fuller understanding of local industry result from the Indianapolis at Work series, the program will have paid ample dividends." **End**

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You can take advantage of lower prices and be sure foods will stay in prime condition.

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Save waste motion by making food convenient for the chef
All compartments are easily accessible. Automatic slam-shut door latches close solidly. Tray slides available for all models.

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Write Dept. S for name of nearest HERRICK supplier.

(For more information, see last page)

continued from page 35

proper way of doing it because a student and parent might travel around to various colleges but never really meet the admissions people or anyone else on the staff. Their impression might be only a "view of the campus". There is a lot more to visiting a college.

Q. What about the third major point that you mentioned earlier, Dr. Moyer, when you said that a good public relations program on the part of the high school could help its students get into the colleges of their choice. Doesn't this sound a little bit like a Madison Avenue technique? Is that what you're talking about?

MOYER: No, I'm not talking about that at all! I mean that the high school guidance department should put its school's best foot forward and should develop a better understanding between the school and the colleges.

Q. Well, how does the guidance director in your high school get to know the admissions officers of various colleges?

MOYER: There are many ways. One

HONORS PROGRAM IN MATHEMATICS

The honors program in this department is designed to introduce the student to the concepts of modern mathematics. These courses differ from the traditional in point of view, method of development and content. More emphasis is placed on concepts and ideas than is customary at the high school level.

Written departmental recommendation is required for participation in the sequential honors courses, mathematics 9 through mathematics 12. Students are selected on the basis of mathematical potential. Criteria considered in the screening process are standardized test results, cumulative student records and teacher evaluation.

Description of the courses in this honors program follows:

Mathematics 9:

In this course the basic concepts of elementary algebra are developed from the point of view of modern mathematics. Some of the new areas investigated are the postulational approach to the number system, the notion of sets, relations (including equations and inequalities) and analytic trigonometry. The subject is presented as a unified course so as to lay the foundation for further study of mathematics.

Mathematics 10:

This course includes the essentials of plane geometry viewed as a logical deductive system. Whenever applicable the concepts are extended to three-dimensional geometry. Plane, solid and coordinate geometry are developed as interrelated branches. Elements of analytic trigonometry are introduced.

Mathematics 11:

This unified course includes the essentials of intermediate algebra, trigonometry and analytic geometry. Throughout the course the emphasis is on an understanding of basic concepts rather than on numerical computation and mere techniques of manipulation. Trigonometry is developed from the analytic point of view. Graphs, the ideas of set, relations, functions, and continuity are introduced and/or extended.

Mathematics 12:

This course is made up of a study of the number system (including an axiomatic approach to cardinals and integers), the function concept (including exponential, logarithmic and trigonometric functions), graphs, analytic geometry, and spatial geometry. The study of mathematics 12 lays a foundation for the courses in elementary calculus.

The text for the course is Allendoerfer and Oakley, "Principles of Mathematics", McGraw-Hill, 1955.

In the 12th grade the student who has followed the honors program may take two additional one-semester courses: probability and statistical inference, and elementary calculus.

The course in probability and statistical inference includes units on:

(1) The basic ideas of modern mathematical logic
(2) An introduction to the algebra of sets
  A. The relation between sets and compound statements
  B. Partitions and counting
(3) The nature of descriptive statistics
(4) Probability from a modern point of view
(5) The binomial distribution: applications to acceptance sampling and testing hypothesis

Texts and materials in probability include:

Kemeny, Snell, Thompson, "Introduction to Finite Mathematics", Prentice-Hall 1957, chapters 1, 2, 3 and parts of chapter 4

"Introductory Probability and Statistical Inference for Secondary Schools": Commission on Mathematics, College Entrance Examination Board, 1957

Allendoerfer and Oakley, "Principles of Mathematics," chapters 1, 5, 13

Elementary Calculus:

This course considers the concepts of function (from the point of view of sets and relations), open and closed intervals, upper and lower bounds, limit, continuity, differentiation and integration of polynomials. There is a minimum of formulas but emphasis on ideas.

The work on logarithms, exponential functions and general powers is covered by the more qualified students.

we have followed for a number of years is to hold an annual "college conference day" in which seniors from about 10 or 11 high schools are transported to a common center and people representing 125 or 135 colleges are there for a definite scheduled program. This way all the counselors and admissions people are able to get together for a social time as well as discussion.

Q. Is that just for the guidance people in the high school and the admissions people in the colleges?

MOYER: The coffee hour and the luncheon are for the guidance people and the admissions officers. In the afternoon, all of the seniors that are college-bound are there to meet with the admissions people and their own guidance people, too.

Q. What else can a high school do to make its guidance personnel or its administrative personnel known to admissions officers?

MOYER: Travel. Visit these colleges.

Q. Do the guidance people do that traveling on their vacation, or is that an expense-covered item during the normal school year?

MOYER: It is both, but it is primarily an expense-covered item during the school year. There is another angle, too, in that there are various associations of admissions officers where guidance and admissions people can get together on a state-wide basis. We have participated in this program.

Q. That is an association of college admissions officers—can guidance people be members, too?

MOYER: Yes. If I'm not mistaken about 100 high schools have joined this association.

Q. In moving out to Hempstead from Briarcliff, you apparently have gone into a brand new high school. From what you told me before, how can your graduates hope to compete? Its "former graduates" are unknown to colleges simply because there are no "former graduates". How did you start out there to begin a real program to help your upcoming seniors?

MOYER: The school is five years old. Last year, the senior class was the first graduating class in which the students had gone through the West Hempstead High School for all four years. Traditions, programs, and so forth, as you know, are developed over a long period of time. Much has been done, because there is a strong guidance department at West Hempstead. They are a very vital part of the program. But we have done a number of other things to help establish our reputation and gain a place. First of all, because I have known personally a great many admissions people, the board of education felt that an announcement sent to all those people regarding my appointment there was a wise thing to do. I have had many replies from that.

Q. That was sort of a press release?

MOYER: Yes, that's correct. Then we decided to join this association for college people and sent our director of guidance to the meeting this year. He came back very well acquainted with Midwest colleges that he had not been able to find time to call on. In addition, invitations have been extended to numerous admissions people to call at our school, see our students, and also to look at our plant and program.

Q. Have those invitations been accepted? I should think these admissions officers, with all the thousands of high schools in the United States, would have very little opportunity to get around to see many themselves.

MOYER: That is true. They have a very hard job in getting to all the places—but they are more apt to call if they have been invited and if they know the guidance director or the administration.

Q. Do you put on any sort of a program for them, or is this just an open-end invitation?

MOYER: It is a personal invitation. To answer that question specifically, we don't put any program on but we try to make it as convenient and cordial as possible. In other words, if transportation is needed from another school, we are glad to furnish it. We try to arrange interviews with students so that the admissions people are not sitting around waiting for us. We arrange it so that it goes quickly and they can go and visit the other schools in the area. We think this is the most courteous thing to do, and we are very grateful that they do come.

This "jacket" contains *the student's transcript, a description of the course-content of subjects he has taken, plus other supporting material.*

Q. Have you developed any other techniques in the way of press releases, or anything of that type, to help educate admissions officers to the kind of program you have in your school?

MOYER: Yes. This year we are sending, with our student transcripts, an outline of the honors program in which the students have participated. Any of our graduates who have been participating in these programs will have, with their transcripts, an outline of the material covered in them. While at Briarcliff we developed a very complete form of transcript that gives a tremendous amount of information. We have had a great many favorable

replies from the colleges about them.

Q. In other words, you developed a format for sending a student's papers in—is that it?

MOYER: Yes. We felt that if we had a boy who was competing with 10 other qualified boys—we ought to have, for the guidance or admissions committee, as complete information as possible. We went to a great deal of time and effort to develop what we think is a very attractive form.

Q. You said you put in some sort of explanation of your honors program. Why would that be a help?

MOYER: There are honors programs —so called—all over. But, just like grades, they mean different things to different people. We want the admissions people to realize exactly what we are talking about when we speak of our honors program. As for the seminar program I mentioned before, we outlined that very carefully and listed all of the people that we brought in from the outside to handle it. To know that a student studied for a certain amount of time under these distinguished people should mean a lot to the admissions people.

Q. Back again to the specifics of what you are doing in West Hempstead. Are there any other ideas that could be picked up by another school?

MOYER: Oh, I think there are small things that any school can do and should do. We feel that something like developing a separate guidance stationery and letterhead, and indicating on it the organizations to which we belong, is useful. We also are trying to encourage our staff to write for professional magazines—and in several cases, recently, some very fine articles have been written by men in our department. We have received very favorable reactions to them. That helps put us on the college map.

Q. Have you done anything with the alumni of various colleges who happen to live in your area?

MOYER: We have not done this in any formal way. We probably will, however. In Briarcliff, we had a very fine program. We initiated what we called a college advisory council. We started out with about 15 or 20 people who lived in the community who were graduates of different colleges, and who had maintained contact in one way or another with their schools. We met regularly to discuss the senior class. Where a student showed an interest in going to a certain college, we often had an alumnus, who knew more of the college life than we did, talk to the student.

Q. Would those people attempt to use whatever friendships or connections they had with the college to help the child get into that college?

MOYER: Yes, although we weren't trying to use it as an additional pressure thing. Many of these people had close contacts with various admissions people in their schools and when they would go back for homecomings they would discuss individual students that they were interested in. They would also write letters and call them on the phone. This gave the admissions people a lot more information, because here was a local person who was a graduate of the college saying that this student was a good prospective student for the college.

Q. Do you do anything else under the title of "public relations"?

MOYER: There are several things that have been done. I think an important one was when our guidance department brought together a summary of where last year's seniors went to college. This was put in readable form and mailed to all the colleges that receive our students. I think this gives them an opportunity to see to what extent, and where, we are placing our students. It gives them a little better understanding of our school.

Q. In these mailings that go out do you recall how many colleges were on your list?

MOYER: No. Not exactly, but we probably sent out somewhere in the neighborhood of 200 releases.

Q. There is one more point, Dr. Moyer. At the beginning of this interview you said that you thought there were things a high school could do to improve its graduate prospects. You mentioned 1) put on a good educational program—something more than the standard program; 2) a good guidance program was needed and 3) this whole area of public relations. Which of the three would you consider to be the most important in getting the child into a college of his first choice?

MOYER: I don't believe that I should say that there is any priority to any one of them because I think they are very much interwoven. The work of the guidance department is very important, however, and often neglected.

Q. One point on the guidance department. Have you ever tried to establish any ratio between the number of guidance counselors and the number of pupils in your high school?

MOYER: There are ratios established —in fact the state of New York has established a ratio—but I find it difficult to work on ratios. I know that, at the present time, one counselor for each of our grades is overworking our staff. The matter of trying to interview and talk with 300 seniors is a very difficult task.

Q. In other words, you currently have one guidance person for the senior class, one for the junior, one for the sophomore. Is that correct?

MOYER: Yes, that is correct.

Q. And you feel that 300 graduating seniors is far too many for a single person to handle?

MOYER: Yes, it is very difficult. Handling just the college placement group—not to say anything about the vocational group—would be difficult to do the way I think it ought to be done. We have to rely, of course, on group guidance, and I think we will have to rely more on the chairman of our guidance department. **End**

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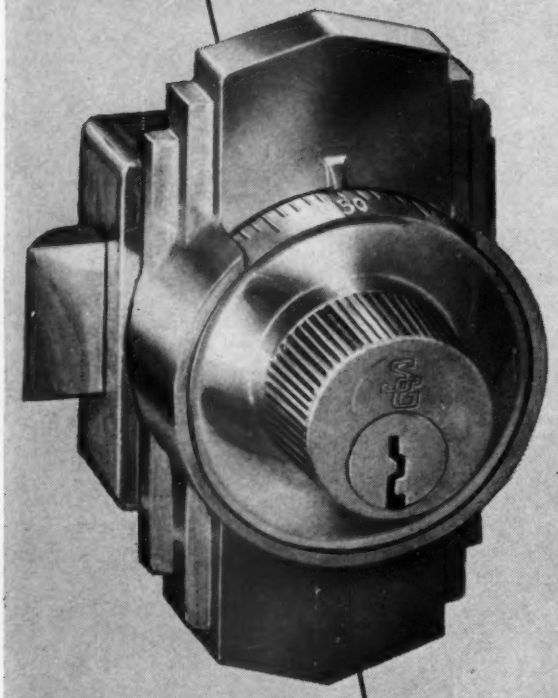

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(For more information, see last page)

Volunteer lecturers enrich high school

■ ■ ■ Los Angeles has found a way to enrich course offerings in senior high school math and science without investing a penny in extra text books or lab equipment—and at the same time has improved public relations with an important segment of the community's industrial leaders.

The only cost of the co-operative industry and education program is the salary of a program coordinator.

It works this way:

A group of local firms employing scientists and engineers supply volunteers—usually in teams of two to five men—who prepare demonstration lectures on the industrial applications of physics, chemistry or math.

These are prepared after the volunteers have been briefed, by school people, on the exact material included in any 11th or 12th grade course of study. Each lecture is tailored to complement and extend a particular unit of work; in fact, a formal preview by classroom teachers and administrators assures the educational value of each demonstration lecture.

Nine firms—among them Hughes Aircraft, which pioneered the program by supplying lecturers for a summer school course in physics in 1956—now have put 55 volunteer lecturers at the disposal of the schools.

"Students benefit, of course, by the content of the lectures," says the program coordinator, David Randolph, "but the part they seem to enjoy most is the unfamiliar lab equipment and demonstration materials which industry lecturers bring with them."

For example, Hughes engineers designed an ingenious, costly, but very effective display piece for a demonstration lecture on concepts of electrical conduction. It made such a hit with the students that Hughes has made five more and given them to the school district for regular use in physics classes.

Planning and policy-making for the industry-education program is provided by a 22-member committee, divided between school people and representatives of such business or professional organizations as the National Association of Manufacturers, the American Society of Engineering Education, the American Rocket Society and the Western Oil and Gas Association. An eight-member subcommittee works out details.

Los Angeles school administrators believe that one reason the program is so effective is that the desire to "do something for science education" originated with the citizen groups and school people merely channeled it into a specific program.

A happy by-product has been that in working with educators and students, industry representatives have developed greater understanding of educational philosophy and problems, a great public relations gain.

"We are so thoroughly sold on the program," says Randolph, "that we are hoping to extend it soon into the junior highs and the junior colleges."

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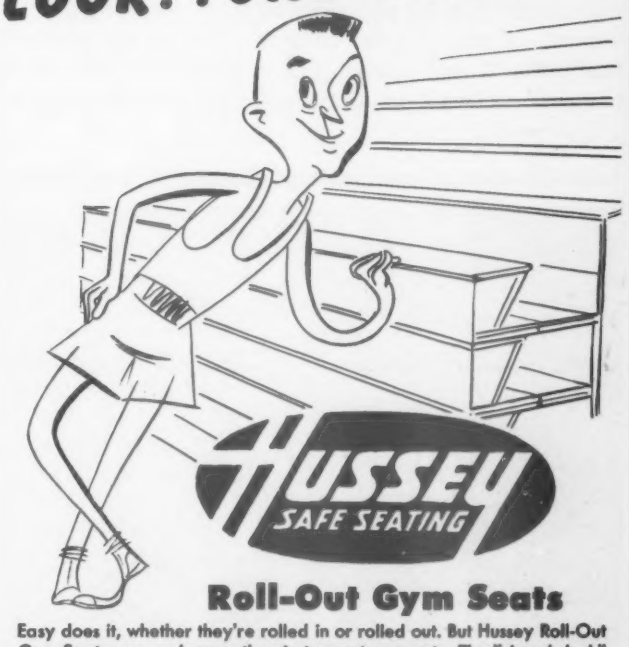

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continued from page 39

during the regular term. And for working people who have for one reason or another failed to complete their high school work, there is a "High School of the Air."

Several schools (including the Philadelphia nine previously mentioned) are doing experiments in cooperation with educational stations under grants from the Fund for the Advancement of Education. Of particular significance is the fact that at least two experiments are concentrating on the teaching of science.

Science and mathematics

For example, KETA-TV, in Oklahoma City, and the Oklahoma public schools are teaching several science and mathematics courses at the high school level for approximately 1,000 students. Five high schools and 10 teachers are involved in this effort to determine whether large classes can be taught by television.

Because more than one-half of the 233 small high schools within a 100-mile radius of Oklahoma City have not been able to offer such courses as physics, chemistry, trigonometry, solid geometry or advanced algebra, two courses in mathematics and science are being televised to most of these schools from the Oklahoma City school system over KETA. It is hoped that this will better the curriculum offerings in the state and also overcome the current teacher shortage in the area.

Television has great utility as a public relations medium, too. Almost since it was established, ETV station KUHT in Houston has regularly broadcast official meetings of the school board. (*SM, October, 1957.*) This special program has consistently gained a huge segment of Houston's viewing public. Station WKAR-TV in East Lansing, Mich., regularly televises classes in session for mothers at home in a program called "Let's Visit School."

Rapid spread

Educational television, over noncommercial stations, is spreading rapidly and cities that have the opportunity to do so, are expanding its use in the classrooms.

The third major way to get educational television into the schools is in many ways the most difficult since it involves competing for time with commercial products. Nevertheless commercial stations by law are required to offer public service programming and school programs fall into this category. A great many commercial broadcasters are happy to serve public education insofar as they can while still operating a profitable business.

There is time available on commercial TV channels, though a limited amount of it. But it takes initiative and imagination on the part of school people to utilize the time. As one commercial broadcaster critically put it: "Educators deal in ideas in their daily work. But they don't often come up with good ideas for program material."

Problem overcome

One way to overcome this problem has been presented by the Educational Television and Radio Center which is making its NET programs available to commercial stations. However, the stations cannot order them. Kinescopes or films of the NET offerings must be obtained by an educational group for use on the commercial channel.

Thus, if a school district can arrange with a commercial station to make time available during school hours, for a nominal fee it can choose from among a wide selection of educational television offerings prepared and designed by experts in the field.

For example, some of the educational series offered through this extended services program during

Teachers educate teachers in Cincinnati. Each week a televised panel discusses problems and presents practical solutions.

1957 included "Before there was a USA," a 36-program history of Colonial North America "Discovery," 13 programs designed to interest children from nine to 15 in natural science; "Eins Zwei Drei," 24 lessons in beginning German; and "The Great Plains Trilogy," a 39-program history of the development of the Great Plains area of the United States.

Also available are single programs and series designed for adult or pre-school viewing that might be scheduled during after-school hours and, in some cases, used for homework assignments.

Commercial channels used

Several school systems have already instituted regular classroom television teaching over commercial stations through the use of these films. Among those carrying out such programs at the present time are the public schools of Odessa, Tex. and Multnomah County, Ore.

The films can be seen in advance for review and the only restrictions the Educational Television and Radio Center puts on their use is that no commercial advertisements may be shown.*

Other than inschool programs, educational television over commercial stations has taken the form of college-level courses for credit; adult education; public relations; teacher training and curriculum enrichment.

In the public relations category, for instance, Phoenix Union High School, Phoenix, Ariz., presented "Know Your Schools" featuring teacher-pupil demonstrations, and the Broward County board of public instruction in Ft. Lauderdale, Fla., produced "The Teacher Speaks," with interviews and discussions about teaching problems and procedures.

A report by the US Office of Education indicated that at least 531 series of programs were presented by educational institutions

(For more information on educational films for use on commercial channels, circle number 784 on the Reader Service Card.)

MORNING SCHEDULE

9:05 Schooltime

Monday—"Conquest of Science"—General Science, High School. Eight tours to places of scientific interest. Among the tours are trips to a cyclotron, to medical research laboratories, to a weather station, to a large telephone center, and to a coke and chemical plant.

Tuesday—"The High Road"—Language Arts, Intermediate Grades. A series of programs that gives children pointers on finding information, note-taking, interviewing techniques, reading for different purposes, studying for tests, etc.

Wednesday—"Gateway to Business"—Business Practices, High School. This gives students planning to enter clerical fields an idea of how to best prepare themselves for and what to expect in the business field.

Thursday—"Under the Sun"—Science, Primary Grades. A series of programs planned to help children interpret what they see, hear and feel in the world around them.

Friday—"Talking Town"—Speech Improvement, Primary Grades. Aims to make children more attentive to sounds—both visually and auditorily—thus enabling them to improve their speech.

9:25 Schooltime

Monday—The High Road—see above
Tuesday—Gateway to Business
Wednesday—Under the Sun
Thursday—Talking Town
Friday—Conquest of Science

9:45 TTD Reading

Miss Stella Nardozza teaches reading to Fifth Graders in classrooms under the signal area of WQED that are involved in the Television Teaching Demonstration.

10:15 Charming Children

Games, songs, handwork for the pre-school children at home with Mrs. Marjorie Harm as the hostess. Parents may enroll their children in this course by calling or writing to the station for an enrollment blank.

11:05 TTD Arithmetic

Mr. Alvin J. Stuart teaches arithmetic to fifth grade classes registered in the Television Teaching Demonstration.

AFTERNOON SCHEDULE

1:00 TTD Physics

Dr. Harvey E. White will conduct physics classes for high school students in the Pittsburgh area.

1:32 Schooltime

Monday—Gateway to Business
Tuesday—Under the Sun
Wednesday—Talking Town
Thursday—Conquest of Science
Friday—The High Road

1:50 TTD History-Geography

Miss Mary Elizabeth Sefler teaches history-geography to fifth grade students in the Pittsburgh area involved in the Television Teaching Demonstration.

2:17 Schooltime

Monday—Under the Sun
Tuesday—Talking Town
Wednesday—Conquest of Science
Thursday—The High Road
Friday—Gateway to Business

2:37 Schooltime

Monday—Talking Town
Tuesday—Conquest of Science
Wednesday—The High Road
Thursday—Gateway to Business
Friday—Under the Sun

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Question #1

". . . If possible, will you please add my name to the complimentary subscription list for SCHOOL MANAGEMENT? I would like to receive it regularly."

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Question #2

". . . We are interested in a group subscription rate, since we would like our six principals, and our citizens' committee, to receive your magazine regularly."

ANSWER You may have a discount for three or more subscriptions to SCHOOL MANAGEMENT if you order them at the same time. The magazine will be mailed to each individual at his own address. In other words, unlike most group subscriptions which are mailed in bulk to a single address, each subscriber will receive his copy directly from us. You may include anyone in a group subscription—your PTA officers, members of your school staff, or members of local civic groups. If you do send us a group subscription, we must have the name and *title* of each subscriber, together with the exact address to which the magazine should be mailed. The regular Group Rate is $6.00 per subscription. You may send a check with your order, or we will bill you later, if you prefer.

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over commercial stations during the 1955-56 school year alone. This is impressive evidence that a great many broadcasters are willing to cooperate with schoolmen in vital public service programming, though they cannot hold out the opportunities for direct teaching and enrichment extended by the non-commercial stations.

"Television will not solve all problems," one educator said, "But it may contribute to the solution of a number of them."

This is not the end of the television story. It's only the beginning. Every day new ways are being found to use TV to teach. There is disagreement as to its value. Some schools will find it invaluable. Others, almost useless. None, however, can afford to ignore it. **End**

GETTING STARTED

The Federal Communications Commission has set aside more than 250 channels for non-commercial television. However, just 31 are now in use. If you live in or near a major city, the chances are that a channel is available in your area.

Many school boards have taken the lead in organizing groups to meet the requirements set up by the FCC for operating non-commercial stations. A national organization, the Joint Council on Educational Television, 1785 Massachusetts Ave., NW, Washington 6, D. C., has been organized to help local groups get started. The American Association of School Administrators and the National Educational Association are affiliated with it.

If your school board is interested in the possibilities of bringing non-commercial television to your community, contact the Joint Council for advice on how to get started.

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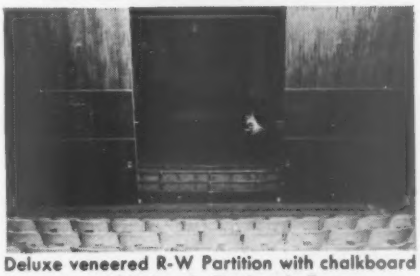

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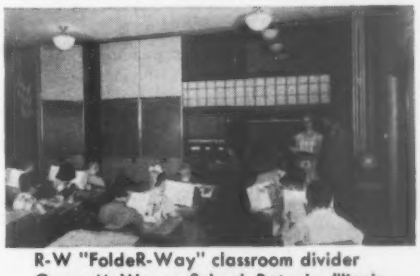

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(For more information, see last page)

PRESS RELEASES

News from the business firms serving your schools

Unit picks up water from any type floor

A new water pick-up machine introduced by Nobles Engineering & Mfg. Co. eliminates the chore of mopping up and wringing out. Called Spee-Dry, it suctions water and dirt from floor along the entire 24″ wide intake head. The machine is self-contained, completely portable and does not require hoses, wands or attachments.

The operator walks with the machine through a wet area, leaving a dry floor behind. It also picks up moisture between tile seams and floor cracks.

According to the maker, it works equally well on wood, tile, concrete or asphalt surfaces. Rubber wheels at each end of intake head are recessed for flush use against walls without marring.

For more details, circle number 798 on the Reader Service Card.

■ ■ ■

Use of glass in the modern school

Applications for rolled, figured and wired glass are described in a new catalog by Mississippi Glass Co. A special section is devoted to use of glass patterns in the modern school.

Design characteristics, light transmission and other information of interest to school board personnel and architects is included.

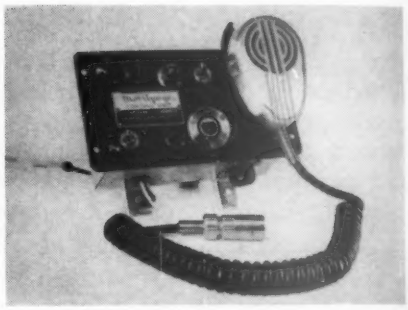
For a free copy, circle number 796 on the Reader Service Card.

■ ■ ■

For pupil safety on school buses

A sound system specifically designed for increased school bus transportation safety has been developed by Midwest Audio Corp. The system, called Mobilpage 500, allows the driver to give instant safety warnings to children both inside and outside the bus.

Mobilpage allows effective voice supervision in the largest vehicles and an outside speaker provides positive voice communication over a distance of several hundred feet. The radio



system has also proven of value on educational tours and can be used for entertainment on routine runs.

The control unit may be flush or surface mounted and the entire system is furnished as a complete package. Power consumption from the 12-volt bus electrical system is negligible. Installation is simple with ordinary mechanic hand tools.

For more information, circle number 788 on the Reader Service Card.

■ ■ ■

Floor Maintainer extremely versatile

A new lightweight floor maintainer with 13-in. diameter brush is being introduced by Clarke Sanding Machine Co. The new maintainer scrubs, waxes, polishes, buffs and steel wools all types of floors with its interchangeable attachments. It weighs only 36 pounds complete with brush.

The manufacturer says one of the big features of the unit is the new heavy duty wheels which are mounted in the main frame for ready portability. When the machine is in operation, the wheels are off the floor. For transporting, the operator locks the handle in verticle position, tips the machine back on its wheels and rolls it over the floor.

The adjustable handle is quickly and easily *set at any desired height.* It can be *locked* in any position *on a 90° arc,* permitting easy operation beneath *furniture and fixtures.*

For more information, circle number 791 on the Reader Service Card.

Easy-to-carry vacuum cleaner

An all-aluminum vacuum cleaner, weighing only 19 pounds, is announced by Hild Floor Machine Co. This compact cleaner has a four-gallon capacity tank with nylon filter. It can be used for wet or dry pickup without filter change.

Market type handle and ball bearing cushion casters make the machine easy to move or carry. It is designed to accommodate 1½″ or 1¼″ hose and tools. It is powered by a ¾-hp by-pass motor.

For more information, circle number 794 on the Reader Service Card.

■ ■ ■

New vacuum cleaners for heavy duty work

General Floorcraft, Inc., has introduced a new heavy duty vacuum cleaner that the manufacturer says is new

"from top to bottom." Called the General E-Con-O-Vac, it comes in three models.

The new machine was built around the demands of commercial vacuum cleaner users who told the company's field representatives what features they most wanted. The result is a wet and dry cleaner which the company says is faster and better cleaning over a longer period of time.

Features of all three models are a full swivel hose connection for both intake and exhaust; intake and exhaust openings in the head; durable cast aluminum head; recessed carrying handles; convenient attached utility basket; 8-in. heavy duty wheels; and powerful by-pass type motors. The machine can be used for both wet and dry pickup with no changes necessary.

For more information, circle number 785 on the Reader Service Card.

■ ■ ■

Stage folds away when not needed

A fold-away stage making rooms and halls serve many purposes, has been introduced by Haldeman-Homme Mfg. Co.

Ruggedly constructed, when not in use it folds to a fraction of its full size for compact storage and portability.

Any stage requirement is met by interlocking basic units available in a variety of sizes and heights. Each unit sets up by hydraulic action at the touch of a latch. Simple mounting secures each stage flush with the wall or in an 8″ deep recess.

Heavy-duty 9-ply 1⅛″ plywood provides a safe, sturdy platform. Folding understructure is made of 9″ steel tubing.

For further information, circle number 790 on the Reader Service Card.

■ ■ ■

Bicycle parker saves space

Bicycle parking often presents a problem for schools. One space-saving answer is the new parking rack designed by FM Engineering Co., Inc. Any size bicycle is held firmly in each stall without the rack touching the bike frame.

Made of weather-proof steel, the Bike-Port can be used year-round or easily collapsed for storage. Lightweight and portable, it can be adjusted for diagonal or conventional parking. The unit can be anchored anywhere in a parking area or placed flush against sides of buildings, fences or curbs.

It is available in units with two to 11 stalls. Individual stalls can also be ordered to extend parking capacity.

For further details, circle number 799 on the Reader Service Card.

Portable copier priced under $100

A new copying machine that costs less than $100 but is portable has been introduced by the Eastman Kodak Co. It weighs just 14 pounds, complete with carrying case.

The Kodak Verifax Bantam Copier can make five copies in 60 seconds at 2½¢ a copy. Ideal for "point of need" copying, the unit will amortize its $99.50 cost in one month if used to reproduce 20 originals daily, the maker says.

This compact budget machine produces the same photo-exact copies as larger and more expensive Verifax models. It can be used to copy anything from typed lists to penned or penciled reports.

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2 APRIL

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Your Position .....

Address .....

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Number of students in your district .....

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1 APRIL

Please print

Name .....

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Your Position .....

Address .....

City ..... Zone.... State.....

Number of students in your district .....

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A CONDENSATION OF THE REPORT OF THE WINNETKA CITIZENS' ADVISORY COMMITTEE ON TEACHER SALARIES

THIS REPORT describes how one school district—Winnetka, Illinois—proposes to solve its special problem of teacher pay. The plan has been approved by the Board of Education. Taxpayers will vote on it on April 12 of this year.

We are reporting it before the referendum for two reasons:

1) *We believe it to be a fresh, clear-headed approach to the national problem of teacher status and teacher shortage. As such, its implications far transcend Winnetka's willingness or ability to adopt it.*
2) *This magazine reaches virtually every district superintendent and school board president in the U. S. Any delay after April 1st would seriously diminish the Report's potential influence outside of Winnetka for the next school year. At this very moment, all over the country, next year's salary schedules for teachers are being decided.*

Not every school district will be able to afford the Winnetka program. But any district can—if it chooses—substitute dollar figures consistent with its own ability to pay and its own local cost-of-living. It is the philosophy and methodology of this report that is significant.

Editor's Note: *This is a condensation of a document which, we believe, will have a profound effect on American education. We would have preferred to bring you this Report in its entirety. In fact, we attempted to do just that. For mechanical reasons this proved impossible. Rather than delay release, we have extracted the essence of the "Winnetka Report" in the pages that follow. Whenever possible, we have quoted directly from the Report. These quotes are in normal type. Our own commentary is reproduced in italic.*

THE INDICTMENT

THE AMERICAN EDUCATIONAL SYSTEM *is in trouble. But the root of this trouble goes deeper than most of our people recognize. It isn't just a matter of curriculum, or classroom shortage, or defeated budgets and bond referenda. These are symptoms. The difficulty lies, say the people who wrote the Winnetka Report, in our sense of values. They point out, "The average citizen and taxpayer would probably be startled to learn that he pays twice as much for liquor and tobacco as he does for education . . . or that he pays $1.75 for amusements against every dollar he pays for education."*

Evidence of this, they state, is found most specifically in "the scandalous tradition of low teaching salaries so long dominant in this land." And, finally, they summarize the whole purport of their report in this statement:

"We do not think the most able young people in America are giving much serious thought to a teaching career. We acknowledge that a teaching career cannot be made attractive by dollars alone. But we do believe that unless the dollars are at least sufficient to raise teaching above its present sub-standard economic status, the schools will find themselves staffed with the left-overs of the labor market for a generation to come."

The Winnetka Report is a step-by-step analysis of this indictment, plus a detailed blueprint of what can be done to answer it. The authors are laymen appointed by the school board to assist with the teacher pay problem. They are people who, by occupation and attainment, are trained in the art of analysis and action. They are also financially-trained men admirably suited to handle this job. *(See box, page 4.)*

CHAPTER I—THE FINDINGS

The Basic Salary Schedule

The present Winnetka teacher salary is severely out of line with the schedules of comparable communities elsewhere in the United States. We realized at the start that the Board of Education was seeking a prompt and substantial solution to the problem. Our investigations confirm the apprehension of the Board because it is quite clear that there is a marked disparity between professional salaries in Winnetka and those in other favored suburban school systems and in comparable business and industrial fields.

Briefly stated, a salary schedule is a device for recognizing the experience and professional training of professional employees. Normally, a teacher advances automatically from the beginning or minimum step to the maximum step, one step per year. As the teacher accomplishes increased graduate study, or fulfills other recognized in-service op-

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Table III

Average Annual Salaries Paid to College Graduate Employes in Six Fields of Work at Various Experience Levels, September, 1957, by Twenty Major Chicago Corporations Compared with the Winnetka Public Schools Salary Schedule

		Years Since Bachelor's Degree				
Field of Work	**Beginning**	**2**	**5**	**10**	**15**	**20**
Accounting	$4,956	$5,844	$7,236	$9,348	$10,800	$12,084
General Business	4,908	5,664	7,140	9,240	10,800	11,964
Engineering	5,328	6,360	7,596	9,312	10,164	11,364
Industrial Relations	5,004	5,736	7,404	9,360	10,200	11,448
Sales	4,836	5,484	7,368	9,180	10,800	12,324
Science	5,232	6,144	7,668	9,576	10,116	11,196
Average, all fields	5,044	5,872	7,402	9,336	10,480	11,730
Winnetka minimum	3,900	4,200	4,650	5,400	5,700	5,700
Winnetka maximum	4,400	4,900	5,600	6,400	6,700	6,700

portunities, such as travel, he becomes eligible for higher maximum salary.

Salaries in Other Fields

As a further measure of the competitive conditions which surround the teaching profession in general, and the teachers in Winnetka in particular, your committee conducted a survey of compensation conditions in 20 Chicago corporations, as compared with the current salary schedule of the Winnetka Schools. First, starting salaries were examined. (The salary of the teachers, of course, is based upon a shorter working year than is true in business and in industry. Reference will be made to this subject in a later chapter.)

Secondly, toward viewing the career characteristics of the Winnetka schedule in comparison with conditions in other fields, the survey examined average salaries at various stages of experience. (See Table III above.)

The data recorded are substantially confirmed by a similar survey conducted annually by Northwestern University, which collects data from 200 national concerns of widely varied interests.

It is clear from the foregoing that the young man or woman contemplating a teaching career is confronted with a starting salary in Winnetka which is 29% lower than the average starting salary in other fields. The lowest average starting salary (sales applicants) is still 24% higher than the local schedule affords. For higher degree levels the disparity is even greater. Viewing Table III, it is evident that the young person contemplating a long-term career must accept the fact that after fifteen or twenty years he would be earning about twice as much in other fields as in the Winnetka faculty.

Supplemental Benefits

In recent years, supplemental benefits of various kinds have become of great importance in industrial personnel practice. These benefits are in addition to salaries and provide essential present and future security for employes and their families. In general, the teaching profession has not kept pace with industry in this regard; Winnetka is no exception. These inadequacies, coupled with an inadequate basic salary schedule, are major defects in the Winnetka system of teacher compensation.

Conclusion

The foregoing is a brief review of the competitive conditions surrounding educational manpower. We have not by any means reported the great number of substantial studies that fortify the conclusions we have drawn. The only conclusion we can reach is that the present salary schedule is too low to maintain the quality of faculty and teaching the citizens of this community expect and demand.

Going beyond the question of recruitment, is is apparent to us that the public schools of the country, as well as the schools in Winnetka, are being heavily subsidized by the teachers themselves, and that through inadequate compensation the individual teacher bears a much greater share of the cost of educating our children than the taxpayer.

Weaknesses in Present Salary Schedule

After studying the existing Winnetka salary schedule and questioning the school administration on its collateral policies, the committee has concluded that the following weaknesses exist, and should be corrected in any new schedule to be proposed:

1. Starting salary fails to meet competition for good beginning teachers.
2. Increments of $150 a year are so small that, after deductions, little real improvement is felt by the recipient.
3. The number of increments are too few, establishing a ceiling at the end of the 14th year, or perhaps at age 36-38.
4. Maximum salaries are considerably below the level which will encourage teachers to seek careers in Winnetka.
5. There is no positive incentive for professional graduate study, as distinguished from other in-service growth.
6. Present policy provides no assurance of balance between academic work and travel as a means of in-service advancement. (Most teachers have maintained such a balance even though not required by the formal policy.)
7. Certain other types of important in-service work are not recognized.

Criteria for an Adequate Salary Schedule

After extensive study and discussion, your committee has adopted fourteen criteria for a salary schedule adequate to the needs of Winnetka. Such a schedule should:

1. Meet reasonable competition for good beginning teachers, without attempting to offer highest starting salary.
2. Assure dignified living standard for maturing personnel.
3. Assure relief from hardship for heads of households.
4. Contribute an uplifting influence to the dignity and prestige of teaching in the United States.
5. Attract and hold in Winnetka teachers and principals of the highest quality, to be recruited from all sources in the United States.
6. Stimulate increased graduate study through the Master's Degree.
7. Encourage study, research and travel beyond the Master's Degree.
8. Provide adequate and dignified maximum salaries for those teachers for whom teaching is only a part of their career.
9. Provide markedly distinguished salaries for those teachers who, in the tradition of Winnetka, make substantial and measurable contributions to education in Winnetka and in the United States.
10. Provide a relatively long period for salary improvement before reaching maxima, but with safeguards against automatic advancement if a teacher's work is unsatisfactory.

Table V

Proposed Teacher Salary Schedule for Immediate Implementation, September, 1958 (Annual Rates)

	I	II	III	IV
Steps	**A.B.**	**M.A.**	**M.A. + 1 yr.**	**Ph.D. or equal**
1	$4,200	$4,500	$4,800	$5,100
2	4,400	4,725	5,025	5,400
3	4,600	4,950	5,250	5,700
4	4,800	5,175	5,475	6,000
5	5,000	5,400	5,700	6,300
6	5,200	5,625	5,925	6,600
7	5,400	5,850	6,150	6,900
8	5,600	6,075	6,375	7,200
9	5,800	6,300	6,600	7,500
10	6,000	6,525	6,825	7,800
11	6,200	6,750	7,050	8,100
12	6,400	6,975	7,275	8,400
13	6,600	7,200	7,500	8,700
14	6,800	7,425	7,725	9,000
15	7,000	7,650	7,950	9,300

Table VI

Additional Steps, Proposed Schedule with Dates for Implementation (Annual Rates)

Effective Date	Step	Col. II	Col. III	Col. IV
Sept. 1960	16	$7,875	$ 8,175	$ 9,600
Sept. 1961	17	8,100	8,400	9,900
Sept. 1962	18	8,325	8,625	10,200
Sept. 1963	19	8,550	8,850	10,500
Sept. 1964	20	8,775	9,075	10,800
Sept. 1965	21	9,000	9,300	11,100
Sept. 1966	22		9,525	11,400
Sept. 1967	23		9,750	11,700
Sept. 1968	24		10,000	12,000

11. Provide annual increments of sufficient amount to be "felt."
12. Contrary to long-established tradition, provide an opportunity for teachers to achieve professional distinction and corresponding salary recognition without leaving teaching for administrative or supervisory office.
13. Recognize the exceptional real estate costs in this area.
14. Serve the long-term needs of the Village, the Board of Education, and the faculty, and not be merely a temporizing, stop-gap measure.

CHAPTER II—RECOMMENDATIONS

Note: *The present salary schedule for Winnetka, though it certainly is not "lush" by any standard, will seem high to readers in many communities. This fact will be further emphasized by the recommendation below. This does not negate the value of this report for these readers. The methodology for studying your local wage levels is still valid. Moreover, the implementation program which follows is equally valid as a blueprint for action.*

The Basic Salary Schedule

In line with the criteria established, we recommend that the following salary schedule, through step 15, be adopted forthwith by the Board of Education (Table V), and that the remaining steps set forth on the following page (Table VI) be implemented annually thereafter, subject only to such deferral of full implementation as may be necessitated by statutory limitations on the tax levy and to the other conditions defined herein.

It may be necessary to proceed by two or more phases to achieve placement of personnel on the foregoing schedule. If so, placement should be effected as soon as possible.

The procedure for transfer of incumbent teachers to the foregoing schedule, together with the detailed criteria for schedule advancement, are described concretely in a later chapter. For the years following full schedule placement, additional steps are recommended as follows: for Column II, six steps; for Columns III and IV, nine steps. These latter steps are to be implemented year by year for the next nine years, subject to the following conditions:

1. That the present national economy will remain fairly constant.
2. That the Board of Education will re-examine annually the effectiveness of the proposed schedule, judging whether or not it is fulfilling the objectives contemplated by this committee and recorded in detail in Chapter IV, following.
3. That the revenue potential of the Board of Education under state law is adequate to support the demands of the schedule, and still preserve a prudent margin for other educational needs.
4. The foregoing conditions make it imperative that the faculty look upon this plan as a blueprint for the future—not a commitment. Actually, no Board of Education can control the actions of a future Board of Education; accordingly, all considerations of this report which fall beyond 1958-59 are subject to ratification in the future.

So that the year-by-year extension of the proposed schedule may be visualized, Table VI (above) demonstrates the full scope intended by the committee, subject to the conditions just listed.

(The timetable of effective dates assumes that two years will be required to achieve initial placement of personnel on steps 1 through 15.)

Other Professional Personnel

For professional personnel in administrative and supervisory categories the committee recommends that Column IV of the basic schedule be utilized, augmented by the following differentials:

Supervisory posts
—Column IV plus $ 500.
Elementary school principals
—Column IV plus 1,000.
Junior high school principals
—Column IV plus 1,500.

In this way, the compensation of personnel in these categories can be directly related to the basic salary schedule but with differentials appropriate to their positions.

Merit Rating

It will be noted that the criteria listed in Chapter I and amplified later in Chapter IV make no mention of merit rating. This subject was discussed and debated at considerable length by the committee, and justifies comment here.

Superficially, the idea of merit is appealing. We are inclined to assume that since human beings differ in their competencies, they should be rewarded according to their worth. This would call for some device that measures the effectiveness of teaching, either subjectively or objectively. However, teaching is an art as well as a science. There is no known device which objectively measures teaching competency, even though this goal has been vigorously pursued by educators for many years.

But quite apart from the lack of valid foundations for measuring teaching competency, your committee feels that the end purposes of education should be examined before assuming that merit rating has a place in education at this time. We found that education in Winnetka calls for a very high degree of cooperation and unity. We found that the pupil as the object of education is the product of many human influences, working in harmony and good faith.

If it is our purpose, and we believe it is, to design compensation policies that will produce a better product, a better program, a better educational design for Winnetka, we do not believe this would be achieved by merit rating. We do not feel that good teachers, now giving all the energy they can offer to children, will somehow discover more energy under a merit system. Nor do we feel that teachers with less devotion and concern will necessarily struggle to do better for reasons of such limited financial differential as can be incorporated in a merit salary device. This is primarily a problem of the administrative and supervisory staff. We do not feel that the competitive implications of merit awards are consistent with the cooperative and mutually helpful practices which now characterize our faculty. We do not think the role of the superintendent as a leader and stimulator and object of faith and good will would be enhanced if he were also the rater, the distributor of financial awards, the judge and jury, as well as counsel.

There is frequently a pre-disposition in favor of merit rating in principle on the part of businessmen because of the generally prevailing business practice of seeking to compensate employes in terms of their relative worth. Even in business, however, where individual performance is much more susceptible to objective measurement and evaluation, merit rating in the strict sense can be applied to only a limited degree. Salary differentials between various jobs are primarily historical in character, or the result of competitive pressures, and only secondarily a consequence of rational determination. Salary differentials between individuals in the same job categories are often more a reflection of relative length of service than of measured differences in performance. This is not very different, although much less clear-cut, than general practice in education.

Most businessmen who have had experience with formal systems of rating employes on the elements comprising their jobs will testify to the artificiality and restricted value of such procedures, recognizing that in the end chief reliance is likely to be placed on judgments that are largely subjective. The classic industrial example of reward according to merit is found in systems of incentive compensation, where employes are paid on the basis of output. Such plans are clearly inapplicable to education for there is no way of measuring output on a "piece work" basis. Incentive methods of compensation, moreover, are likely to be complicated and to require considerable management. It has been one of the basic findings of human relations research in industry during the past quarter century that economic incentives have only limited utility in encouraging superior performance, and that they often create special problems of morale and of supervisory-employe relations.

In the opinion of the committee, the experience of industry does not indicate that merit rating as that term is generally understood could be successfully adapted to education. However, we feel that the schedule and policy we have designed fulfill the desirable feature of acknowledging superior professional service where it is demon-

strated. We believe that inferior professional service can be treated as such under this schedule. Beyond these features we are not prepared to venture further in the merit field.

Supplemental Employe Benefits

A fundamental principle of good personnel practice is that adequate provision must first be made for salaries; after this is done, attention may be given to desirable forms of employe protection over and beyond salaries. Such supplemental benefits are important and an essential feature of a balanced, well-designed personnel program, but they should never be provided in lieu of or at the expense of basic monetary compensation.

In our judgment, the basic salary schedule herein recommended places the Winnetka system in a position where attention can be paid to other requirements of an adequate over-all system of compensation. Industry has led the way in this regard, and the following recommendations are based largely on the experience and practice of industry rather than that of the teaching profession. These recommendations embrace retirement benefits, group life insurance, and comprehensive medical protection. The specific details of the proposals were worked out with the aid of competent technical counsel. The highlights are as follows:

Supplemental Retirement Plan: At present, the Teachers' Retirement System of the State of Illinois provides substantial, and in our opinion adequate, retirement benefits with respect to earnings up to $8,000 per year. Teachers contribute 9% of their salaries to this system. If the preceding salary schedule is adopted, provision should be made for retirement benefits on salaries beyond $8,000, at a level reasonably comparable to that provided by state law for earnings below $8,000.

Group Life Insurance: For the current protection for dependents, a flat $5,000 of group life insurance should be made available for all full-time employes (professional and non-professional) with one year or more of service in Winnetka, the amount of insurance to be reduced to $1,000 at age 60 or at retirement if earlier than age 60.

Comprehensive Medical Expense Insurance: The present Blue Cross-Blue Shield plan, which is paid for entirely by employes, should be replaced with a comprehensive medical expense insurance plan. Such a plan should provide that after an initial out-of-pocket deductible of $50 on an insured individual (which would not apply to in-patient hospital charges for room, board, and extras) 80% of all additional covered medical expenses would be paid for the balance of that calendar year up to a maximum of $10,000 for each individual. A maternity allowance of $200 should be provided without deductible or co-insurance features. Eligible dependents should include the employe's wife and unmarried children under 19 years of age and, if in full-time student status and dependent on the employe, to the 23rd birthday. After retirement, with full cost borne by the pensioner, the deductible should be increased to $100 for the pensioner and his wife and their maximum should be reduced to $1,000 for each insured individual for the balance of his lifetime. All full-time employes, non-professional as well as professional, should be eligible to participate in this plan after one year of service in Winnetka.

Annuity Benefits

The present annuity system, designed in 1930, was examined in detail by the committee, with the advice of experts in the field and the Welfare Committee of the faculty. This plan is out-moded and obsolete. It was originated twenty-seven years ago to augment what at that time was a wholly unsatisfactory state retirement system. The retirement system has subsequently been vastly improved. The premium payments of up to $500 per year originally assured a monthly income of $100 per annuitant. This is no longer true. Some annuitants would receive as little as $18 a month. The annuity carries no provision for death benefits, accrual, or insurance.

Fundamentally, the original purposes and concepts of the present annuity plan have ceased to exist; much more important benefits to teachers are felt to be needed. At the same time, it is recognized that many teachers have built up equities in the present plan and that their prospective annuity benefits are a part of their future financial planning. In designing a more comprehensive and better balanced benefit program, the committee does not wish to jeopardize those arrangements.

It should be understood that teachers have a vested interest in the annuity benefits which they have already earned. If a teacher wishes, he may accept a paid-up annuity at its then value at the time the new program goes into effect. However, if the teacher wishes to do so, he should have the privilege of continuing the annuity payments privately. The proposed salary schedule, even when implemented on a two-phase basis, provides immediate salary increases great enough for the teacher to take over the payment of his personal annuity premiums and still have enough left over to represent a salary increase. In those few cases where there may possibly be inequities, the Board of Education should be able to work out an equitable solution.

We therefore recommend that as of September 1, 1958, all annuities now in force become paid up, with full ownership of the policies resting with the teachers concerned. . . .

The funds now being expended for the annuity payments will be utilized to fulfill the Board's share of the proposed insurance premiums. We believe this is a far more effective use of the funds, both for the teacher and for the community than the present annuity.

Division of Costs: It is recommended that the supplemental retirement plan be paid for entirely by the School Board and that the costs of the group insurance and comprehensive medical expense insurance plans be shared jointly by employes and the School Board. It is anticipated that the share borne by employes, plus the savings the School Board will realize through the discontinuance of the present teachers' annuity plan, will make it possible to provide the very much wider protection contemplated without additional cost to the Board and at a saving to employes compared to what they are now paying for much less adequate benefits.

The Cost:

The present cost of the salary schedule for Winnetka teachers, supervisors, and principals is $613,850. The first full year of budgeting the proposed schedule if wholly implemented in September, 1958, would require an increase of $117,683. (As noted, the proposed new system of supplemental benefits can be provided without any net increase in cost.)

It has been the very real hope of the committee that the recommended schedule as defined in Table V could be put into effect in September, 1958. However, as noted earlier, we have been aware of the restrictions faced by the Board of Education in undertaking any immediate increases of a substantial character. We realize that the Board of Education must levy a tax in April of 1958, and that income from this levy will not be realized until a year later. No funds are budgeted at this time to effect any changes for the period September, 1958—March, 1959.

Accordingly, we have developed what we believe to be a realistic plan for implementing the proposed salary schedule over the next two years, in recognition of the tax cycle.

This plan, the details of which will be described further, would place the present faculty on the new schedule to the extent of 50% of their increased salaries in 1958-9 and the remaining 50% in 1959-60. As of 1960-61 those eligible would be advanced to the next higher increment of the schedule. In other words, the new schedule would be adopted in two stages or phases, thus reducing the immediate costs which the Board of Education must meet in September, 1958.

In order to estimate the costs for not only the immediate years of the phased adoption, but for the foreseeable future, a projection has been made of the present staff, allowing for annual increments and retirement at age 60. Arbitrary salaries of $5,000 have been allowed for replacement personnel. According to this projection, the next five years after 1959-60 will call for rela-

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tively modest increases as the schedule continues to be implemented. The increases are partially off-set by the retirement of higher salaried individuals.

Further Steps

The burden of carrying out these recommended salary objectives, of course, rests with the Board of Education. The full significance of the schedule will not be realized short of ten years; this is as we intended. For we believe the Board of Education should undertake the following steps in implementing the new schedule beyond the 1958-59 level described in Table VI (page 3):

1. Evaluate the ability of the School District to fulfill the fiscal obligations of the successive increments, year by year, depending upon the earned salary status of the faculty each year. In other words, before proceeding beyond the fifteenth step called for in 1958-59, calculate the dollars required to fulfill the advancement to Step 16, and determine whether sufficient levy authority exists under the law to fulfill the demands of Step 16, and determine whether sufficient levy authority exists under the law to fulfill the demands of Step 16, in the light of faculty placement at that time. Repeat the process each year thereafter, with the full understanding between the Board and the faculty that steps beyond 15 are not a commitment or an agreement, but a goal to be sought.

2. Evaluate the effectiveness of the proposed schedule, particularly as to whether it truly is serving the ends established in the criteria listed in Chapter I and discussed more fully in Chapter IV. If the "superior quality of instruction" which we believe the community wants and is prepared to pay for is not being realized, the schedule would not be fulfilling its purpose, and should be re-evaluated, or possibly set aside. If, on the other hand, major changes in the value of the dollar occur, causing these recommended figures to lose their meaning, the schedule should be strengthened accordingly.

3. If the schedule appears solely to serve as a justification for credit garnering, and corresponding salary advancement, with the corresponding distraction of teachers from their primary obligations to children in the classrooms, it should be quickly set aside. The schedule is interpreted as a standard for recognition of high quality professional service, not a mechanism for quick advancement to higher income brackets.

The foregoing admonitions are essential components of our recommended plan. They should be fully understood by all concerned. They offer the advantage of leaving considerable year-by-year discretion to the members of the Board of Education.

CHAPTER III—INTERPETATION OF PROPOSED SCHEDULE

Advancement on Schedule

1. To advance from Column I to Column II a teacher shall have completed the earned Master's Degree or, when specifically approved by the Superintendent or the Board of Education, may advance to Column II after completion of 30 hours of graduate study. Except in unusual cases the requirement for the earned Master's Degree shall apply.

2. To advance from Column II to Column III the teacher shall have, in addition to the requirements for Column II, a total of 30 semester hours of graduate study or equivalent approved initiative units. At least 15 of the required 30 units shall be in graduate study.

3. To advance from Column III to Column IV the teacher shall have, in addition to the requirements for Column III, an earned doctorate or not less than a total of 15 semester hours of approved graduate study and 15 approved initiative units in the category of independent research, professional leadership, or professional writing. To enter Column IV without an earned doctorate the initiative units shall include a major research study or creative instrument contributing substantially to the field of education and to education in Winnetka. It shall be of a scope and value equivalent to a doctoral dissertation and subject to pre-approval and final approval by the Superintendent and the Board of Education. A committee of the faculty shall serve as a reviewing board for the Board of Education to evaluate work contemplated or performed in this category.

Teachers contemplating a doctoral program shall be required to secure pre-approval and final approval of the dissertation before recognition is granted for placement in Column IV. The dissertation shall have to do with the improvement of some phases of education in Winnetka and in education at large.

Upon placement in Column IV no further initiative units are recognized, all being absorbed in placement on the scheduled step.

4. The newly appointed teacher shall be placed initially on the appropriate column of the schedule on a step corresponding with the year of service, not to exceed recognition for seven years prior service except in unusual circumstances. The teacher shall progress successively from the lowest to the highest step of his column so long as his work is satisfactory.

It is not intended that this condition be a cause for formal individual year-by-year appraisal. This condition shall apply to the rare cases where teachers have failed to respond to administrative and supervisory counsel, and shall be available as a last resort to bring about corrective measures. A teacher whose normal increment is not to be granted shall be so advised in writing by March 1 preceding the September when the withheld increment shall become effective. The communication shall specify the unsatisfactory conditions causing the withheld increment. The teacher may seek the assistance of the Welfare Committee of the faculty in such a case, to advise the administrative staff in the fair disposition of the problem.

Initiative Unit

One initiative unit is equal to one semester hour of graduate study or recognized travel, work experience, or research. Initiative units, other than in academic work, may be earned and recognized only after joining the Winnetka Schools. An initiative unit increases the base salary in any column except Column IV by $10 a year, recognized in groups of 10 units, or $100, corresponding to the semester hours of graduate study or recognized equivalent. At the time a teacher crosses from one column to another, the accrued initiative units totalling 30 are absorbed in the new salary base.

Initiative units may be earned as follows:

1. **Approved graduate study.** The teacher may earn initiative units by taking approved graduate work, at the rate of one initiative unit per semester hour.

2. **Approved work experience.** A maximum of ten initiative units may be earned by a teacher in this category. To qualify for approval, the work must have a tangible relationship to the classroom responsiblities of the teacher, and must be performed essentially as a deliberate educational experience. Conventional summer work intended primarily to augment income shall not qualify.

3. **Approved travel.** A maximum of thirty initiative units may be earned by a teacher in this category, subject to the limitations defined under **Advancement** above (15 units in Column II—15 units in Column III). Not more than ten initiative units shall be granted for travel to the same foreign country. Not more than five initiative units shall be granted for domestic travel (United States or Canada). As a rule of thumb, a week of foreign travel shall be recognized at the rate of one initiative unit; domestic travel, at the rate of one initiative unit for two weeks.

4. **Independent Research, Professional Leadership, or Professional Writing.** A maximum of 30 initiative units may be earned in this category, subject to the same limitations as in 2 above. The work shall be of such character as to make a significant contribution to education in Winnetka and to the teaching profession at large. Each individual contribution in this category shall be awarded recognition according to its worth as judged by the Superintendent of Schools with the assistance of an advisory committee of the faculty. Work performed by teachers seeking placement in Column IV through other than the earned doctorate shall be classified under this category.

It is emphasized that work performed under this category is above and beyond

Table VII

Projection of Salary Budget 1958 to 1965, Teachers, Principals and Supervisors, Assuming No Increase in Number

		Total Professional Salary Budget	Increase over Previous Year
Phase I	1958-59 (50% implementation)	$675,421	$61,971
Phase II	1959-60 (50% implementation)	731,133	55,712
	1960-61 (first new step)	739,550	8,417
	1961-62	751,663	12,113
	1962-63	761,876	10,213
	1963-64	775,864	13,983
	1964-65	780,327	4,463
	1965-66	779,715	—612

the normal in-service committee work and other responsibilities of the teacher. Great caution should be exercised by the administration through the pre-approval technique to avoid a distortion or a dissipation of the teachers' energies and interests into initiative unit channels with resulting damage to regular committee work. It is repeated that work in this category is above and beyond expected professional responsibility.

All work performed in this category shall relate to education in Winnetka. Before submitting a plan for pre-approval of initiative unit work in this category, the teacher shall consult in detail with the principal, receiving the principal's guidance in the work.

5. **Pre-approval and Approval.** All in-service advancement by the teacher is subject to pre-approval by the Superintendent of Schools and the Board of Education, prior to initiating the activity. Upon completion of the activity, the teacher will submit evidence of successful completion. A committee of the faculty shall be available to assist the Superintendent of Schools in judging the worth of in-service work. In-service salary recognition will then be awarded by the Superintendent of Schools to become effective at the start of the following school year.

Transfer of Incumbent Staff to Proposed Schedule

In transposing the placement of teachers from the 1957-58 schedule to the new schedule, effective September 1958, the following conditions will apply:

1. Initiative units earned prior to September, 1958, even though not consistent with the criteria for the new schedule, shall be recognized for placement in Column I, Column II, and Column III. Only the earned doctorate shall be recognized for placement in Column IV, since the alternative criteria for Column IV placement relate only to the future. For example, a teacher with the A.B. degree may have earned 30 initiative units of travel, qualifying under the old schedule recognition. This teacher will be placed in Column II, even though the units do not fulfill the new conditions.

2. All teachers who have reached the maximum step on the old schedule (Step 14), shall be placed on Step 15 of the new schedule (following the two-phase procedure outlined in the preceding chapter). Subsequent steps, as defined in the schedule, shall be added year by year, subject to fiscal resources and re-evaluation by the Board.

3. Graduate study, or earned initiative units in excess of those required for placement in Columns II and III shall be recognized in groups of ten, equivalent to $100 added to the scheduled salary. Not more than 30 initiative units may be recognized in any column; in other words, not more than $300 shall be added to the scheduled salaries in Columns I, II, and III.

4. Otherwise, teachers shall be placed in the next higher step of the new schedule, corresponding to their present placement on the old schedule.

CHAPTER IV—APPLICATION OF CRITERIA

At the conclusion of Chapter I are listed fourteen criteria which the committee considers essential for an adequate salary schedule. The manner in which these criteria are incorporated in the proposed salary schedule is outlined below, together with certain other general observations and recommendations the committee considers pertinent.

1. Meet reasonable competition for good beginning teachers, without attempting to offer the highest starting salary.

It will be noted that the committee has recommended a starting salary of $4,200 in the A.B. column, and $4,500 in the M.A. column. These are the steps most likely to be used in placing beginning teachers. We have not sought to make these steps oustandingly high; in fact, the committee debated for some time whether or not to increase them $200 or $300 above the figures recommended. We felt that no good and enduring purpose would be served by exceptionally high beginning steps. We reasoned that each year 15-18 new teachers are added to the Winnetka faculty. We learned from the record (and concur in the idea) that only about three or four of the new teachers are beginners, falling at step one. These beginners, we feel, should be selected, and should select us, not for a momentary high salary the first year, but for the total implications of the total schedule. We would, in other words, be hoping to identify career teachers for Winnetka.

No doubt the next few years will reveal many communities passing by this $4,200 beginning figure. (California's recent law establishing this as a minimum is noteworthy.) However, we feel that some communities, by the nature of their educational goals and standards, must command the services of large numbers of beginning teachers each year. This problem is different from ours.

2. Assure a dignified living standard for maturing personnel.

This is probably the single most significant criterion that we have named. In referring to the "maturing teacher," we refer to the person on the upper steps, perhaps after 15 years or more of teaching. We believe the **maximum** figure to which a teacher may aspire, and which he may count upon with a fair amount of certainty for a lifetime is the key figure in any schedule contemplated.

The real significance of this criterion, however, lies in what happens in the future. In this connection, the committee has designed what it believes to be a "break-through" in the tradition of teachers' salaries in the United States. Rather than rest upon year-by-year accretion of small and sometimes (elsewhere) bitterly contested salary gains for teachers, the committee has established long-term maximum salaries that rise above the traditions of "what-the-traffic-will-bear," and will serve as new standards for elevating teaching.

3. Assure relief from hardship for heads of households.

The term hardship means different things to different people. In this criterion we are limiting our definition to a provision for dependency allowance for those teachers in the beginning stages of the salary schedule who would otherwise be unable to subsist. In adopting this recommendation we simply reaffirm, for the most part, the policy now in force under the old schedule.

We propose that any teacher qualifying under the terms of the Internal Revenue Bureau's definition, except in the case of a spouse, may claim a dependent or dependents and receive an added allowance of $200 per dependent until such teacher's total salary shall reach $6,000, at which time the salary shall remain at $6,000 until normal increments or in-service recognition shall have reached the $6,000 sum. The dependency clause shall not benefit a teacher whose spouse is regularly employed or earned more than $600 during the previous year.

Thus, a young father of two children, starting as a beginning teacher, A.B. degree, would receive the basic $4,200 plus $200 per child, or a total of $4,600. Assuming no change in column, this teacher would continue to receive the dependency allowance until his eighth step, at which time his salary, $5,600 + $400, would be $6,000. He would remain at this salary for Step 9 ($5,800) and Step 10 ($6,000). At Step 11 he would no longer receive the dependency allowance.

4. Contribute an uplifting influence to the dignity and prestige of teaching in the United States.

Of course we will not guarantee that this schedule will have immediate and far-reaching consequences among teachers everywhere. We hope it will. We are firmly convinced that the significance of salaries in the $10,000 to $12,000 bracket for competent teachers as they near the peak of their teaching careers will exceed the dollars involved.

We believe that the people of this country do not deliberately choose to pay their teachers so little. We believe the present condition is a product of inertia and general lack of information. We believe that fundamental American values regarding the place of the teacher must be illuminated. The average citizen and taxpayer would probably be startled to learn that he pays twice as much for liquor and tobacco as he does for education . . . or that he pays $1.75 for amusements against every dollar he pays for education.

American education is heavily subsidized by the teachers themselves—through underpayment. The typical Winnetka household pays a school tax of about $200-$400 a year. The typical Winnetka teacher makes a far greater contribution through failure to receive a salary commensurate with the value of his services. What is true here is true almost universally.

5. Attract and hold in Winnetka teachers and principals of the highest quality, to be recruited from all sources in the United States.

Attracting and holding high quality teachers in Winnetka has been the implicit purpose of two or more other criteria. No further explanation is offered.

6. Stimulate increased professional study through the Master's Degree.

This criterion, recognizes a certain true condition now present in education, and probably destined to remain present for some time: i.e., the difference between the two-career teacher (homemaker, wife, mother, as well as teacher), and the single-career teacher. Both have their place in education.

Accordingly, the maximum schedule for the Bachelor's Degree has been set at a sufficiently high figure, $7,000, to provide an attractive and rewarding life to the teacher who does not hope to do more than a good solid job of classroom teaching and all that that implies. But for those teachers who choose to make teaching in its fullest sense their life's work, the advantages of the higher columns of the schedule are offered. The difference between Column I and Column II at the ultimate maximum is $2,000. The way is open, of course, for still further advancement in Columns III and IV.

In the past it has been possible, as stated earlier, for teachers to move to the higher brackets of the old schedule without mandatory standards of profes-

sional work. In the light of the new dollar levels, the earned Master's Degree is expected for placement in Column II. In isolated cases, the Board of Education may waive the earned Master's per se, when justified, but the fifth year of formal education is an integral part of the **quality formula** which your committee has sought to design.

We do not require that these terms be retroactive in the present faculty.

7. Encourage study, research, and travel beyond the Master's Degree.

The present Winnetka schedule recognizes graduate study, travel, and certain limited work experience outside of education as criteria for placement in higher salary brackets. Actually, a teacher may, by performing certain travel both in this country and abroad, qualify for advanced salary placement without performing any graduate study.

Your committee accepts and endorses the concept of recognizing such experience as travel as an important and contributing element in the compensation policy. We note that no teachers have limited their in-service growth to travel, and that well over half of them have earned the Master's Degree or more. However, consistent with the quality factors which are implicit throughout our recommendations, we make the assumption that teaching is a learned profession in addition to being an art and a science. And we further assume that, within limits, the more training a teacher has, the better he is. This is not to say that all teachers without degrees are poorer teachers than all those with advanced degrees; nor do we encourage excessive and exclusive graduate study beyond the Master's Degree. We stand on the generalization that formal graduate study improves teaching quality .... we recommend that all teachers fulfill the fifth year of training before qualifying for salary placement above the bachelor's degree. We further recommend that subsequent in-service work include at least equal parts of graduate study.

The proposed salary schedule makes it possible for a teacher, having once accomplished the Master's Degree and gained placement in Column II, to move to Column III in one of the following ways:

1. Continued graduate work approved by the Superintendent and the Board of Education.
2. Travel approved by the Superintendent and the Board.
3. Independent research, writing, or other creative professional work which contributes substantially to education in Winnetka and the United States, when approved by the Superintendent and the Board of Education.

It is expected that most teachers will not proceed beyond Column III, although this is not intended as a curb against those who would. To enter Column IV, the teacher shall have an earned Ph.D. or equal; the degree work, except in the event of a newly employed Ph.D., would have been performed under the general and specific approval of the Superintendent and the Board of Education on a subject or field directly relating to education here.

The "or equal" feature of Column IV is an extremely important part of this schedule. This is meant to provide a means for a teacher to achieve the highest salary category in the schedule, without the Doctor's Degree. At least one-half of the 30 units required for placement in Column IV should be earned in the category listed above as "research, writing, or other creative professional work." The only difference in the definition of this category in the Column IV requirements is one of degree. The work shall be of a highly distinguished professional calibre, equal in importance to a doctoral dissertation.

It is recommended that a faculty committee serve as an advisory body to the Board of Education in considering for pre-approval any work contemplated in this category, and in subsequently evaluating the work for approval by the Board of Education. There may be need at some future date to establish concrete standards for independent work in the Column IV qualifications.

8. Provide adequate and dignified salaries for those teachers for whom teaching is only part of their career. (Treated under item 6 above.)

9. Provide markedly distinguished salaries for those teachers who make substantial contributions to education in Winnetka and the United States.

This item has been treated in some detail in 7 above. Specifically, this criterion relates to Column IV on the schedule. The potential maximum salary of $12,000 is a realistic and commensurate figure for those distinguished teachers who give much of themselves to children over a lifetime.

10. Provide a long period for salary improvement before reaching maxima, with automatic advancement to each successive higher step as long as the teacher's work is satisfactory.

The present schedule allows only thirteen steps for salary advancement, at the rate of one step a year. We believe that the present increment is too small (see item 11, below) and too few.

Interpreted bluntly, under the schedule now in effect, the young man joining the Winnetka faculty, just out of college, receives $3,900 a year, and for ten years thereafter receives a $150 increase each year until he reaches a salary of $5,400. Threafter, for three years he receives an increase of $100 until he reaches the ceiling of $5,700. By this time he is, perhaps, 36 years old—just reaching the prime of life with his best and most productive years ahead of him.

Of the many salary schedules that we have examined, this weakness is almost universally true: the number of steps is so few that before reaching what industry would consider his truly productive years, a teacher has stopped improving his living standard. We believe this condition should be drastically improved, particularly for those teachers who demonstrate the initiative necessary to increase their professional training well beyond the Bachelor's Degree.

Our proposed schedule seeks to remedy this weakness. Fifteen steps are provided for the Bachelor's Degree holder who chooses not to perform advanced professional study. For the Master's Degree holder, the steps continue to 21; for a year beyond the Master's, to 24. The teacher who earns his place in Column IV also may continue to advance for 24 steps. This, we feel, is a more realistic schedule in that it recognizes the facts of professional life and provides more adequate rewards for continued personal and professional growth.

11. Provide annual increments of sufficient size to be "felt."

The present Winnetka schedule provides an annual increment of $150 for the first ten steps and $100 for the last three. These amounts are so small as to make little appreciable difference in spendable income from one year to the next. For example, a teacher who is head of a household with two children keeps only $111 of his $150 increase, after taxes and retirement deductions. In terms of 1949 dollars, which obtained at the time the present increment was adopted, the deflated purchasing power of the increase is $93.42 per year, or $1.80 per week — hardly enough to be noticed.

We find from our survey of 20 Chicago corporations that the average annual increment for the first 15 years for all employes studied is $362. This increase, according to our findings, continues considerably beyond the 15 years. In the Winnetka schedule the annual increase should be substantially improved, not necessarily to equal corporate salary increases, but enough to permit the employe to realize at least some tangible improvement each year in his disposable income.

12. Contrary to long-established tradition, provide an opportunity for teachers to achieve professional distinction and corresponding salary recognition without leaving the classroom for administrative or supervisory office.

We feel that good teachers belong in the classroom. This is not to say that administrative and supervisory officers may not be good teachers; but there are relatively few administrative and supervisory posts to which teachers may look forward for advancement. We believe we have designed a schedule which will encourage advancement to higher levels of income without causing the teacher to leave the classroom and seek higher professional office.

13. Recognize the exceptional real estate costs in this area.

The committee devoted much attention to the subject of real estate. We debated whether or not teachers should be granted some type of subsidy for a down payment; whether publicly-owned housing should be developed and made available at moderate cost to teachers; whether a central loan fund with deferred mortgage arrangements could be developed through private or public channels.

We concluded that the teacher should have no different treatment from other citizens. We should not set up a "teacherage" and we should not demean him with subsidized handouts. Rather, we should compensate him in a way that will, in due course, permit him to live in a suitable home of his choice.

14. Serve the long-term needs of the Village, the Board of Education, and the faculty, and not merely be a temporizing, stop-gap measure.

The proposed schedule is recommended for only partial implementation in the fall of 1958. Each succeeding year thereafter for nine years there are further phases of the schedule to be applied. These latter phases must be reexamined by the Board of Education each year before salaries are changed.

Even after the new schedule is fully implemented, however, it should be reexamined periodically in the light of changing needs. The drastic revisions recommended in this report are largely a consequence of failure to keep former plans up to date.

Other Conditions

1. We expect the Winnetka faculty to participate actively and vigorously in finding ways for teachers to increase substantially their efficiency in working

with children. We do not accept as final the belief of most teachers, conscientious and sincere as that belief is, that superior teachers can deal effectively with only a given number of children at a given time. Teachers are a rare commodity. We believe that not nearly enough unshackled thought has been given to the best use of the teacher's time and powers. This calls for invention and discovery. We challenge the teachers of Winnetka to contribute to the solution of this problem.

2. Winnetka already has one of the highest costs-per-pupil in the United States. Further, it has one of the highest ratios of professional staff to total number of pupils. Unless the staff ratio can be reduced we do not believe the full schedule can be implemented. We established as a condition of the new schedule that the Board of Education and the teachers search vigorously for ways to reduce the professional staff ratio, calling for higher performance, and if necessary longer hours and harder work by all concerned, consistent with the higher salaries offered.

3. In the evolution that appears to be affecting education, we can envision other basic changes that will directly affect teachers, and that, for the most part, will need to be developed by teachers. They have to do with the length of the school year, the length of the school day, the nature of what the school's job in our culture is. We believe that school buildings and equipment are now not efficiently used. We challenge the Winnetka Board of Education and teachers to seek greater efficiency.

CHAPTER V—SUPPLEMENTAL EMPLOYEE BENEFITS

Note: *The principle's detailed in this chapter have been covered, in brief, in Chapter II above. In general, the Winnetka plan does nothing more than suggest a policy comparable to modern industrial practice. The total annual cost to the Board of Education for a truly broad program of Group Life and Comprehensive Medical Insurance, for 132 employees and their dependents, is estimated at $12,760 or less.*

CHAPTER VI—THE PROFESSION OF TEACHING

Note: *As a part of its work, the Winnetka committee made a detailed study of the "vital statistics" of its teaching staff. From this study they drew several inferences:*

The large percentage of our teachers who have no cash reserves did not surprise us. But it embarrassed us. We are gravely concerned that 91 of the 108 members of the professional staff find their teaching salaries insufficient to live on and are forced to supplement their income in various ways. This supplementation is a direct subsidy, by the teachers, of education in Winnetka. This situation is not only grossly unfair on its face; where it requires outside work, as it does in 46 of the 91 cases, it may be a serious deterrent to effective teaching. In some cases, the kind of outside work in which the teachers engage is consistent with their professional roles. In other cases, however, it is highly inconsistent and may even damage the respect in which the teacher should be held in the eyes of pupils and the public. Generally speaking, there is no objection to part-time summer work, especially if the nature of the work is befitting. We were severely distressed, however, to learn of those teachers who must accept part-time employment either before or after school during the school year.

Popular Fallacies re Teacher Salaries

We are aware of the arguments offered in justification of low teacher salaries. Among these arguments are the following:

1. The teacher without dependents whose salary in mature years (say $6,500) is already receiving an income adequate to her needs.

Those who advance this argument fall prey to the popular tendency to base teacher salaries on **how much the teacher needs** rather than on **how much the teacher is worth.** Nearly all states now have laws calling for single salary schedules, i.e., like salary for like duties, irrespective of sex, marital status, or level of instruction. Thus, the same teacher for whom a $6,500 salary may be adequate can be teaching across the hall from a man or woman who has a son or daughter or both in college, and for whom the same salary is wholly inadequate. Our proposed schedule endeavors to overcome the "what the traffic will bear" concept, and throw some light on the "what good teaching is worth" concept.

2. Young ladies entering teaching just out of college may be only interested in a short term teaching career, and may be pre-occupied with marriage

This condition is true, but it is not new. In attempting to define truly professional salaries for professional personnel, your committee has some reservations about making the early steps in the schedule extraordinarily attractive. For example, we could make a fairly strong case for about $4,500 as a starting salary. We would be able to compete very successfully with most communities for beginning teachers who are interested **only in the starting salary.** For many communities this solution would be desirable. It would give them the pick of some of the best young people available. But it would, unless accompanied by an attractive maximum salary schedule, attract those young people who were interested only in a short-term career in teaching.

We believe that conditions in Winnetka call for the large bulk of the faculty to be career teachers who will come here after a short period of experience elsewhere, and who will, if successful, remain for a long time. The educational demands and the educational history of Winnetka call for these kinds of people. Therefore, in establishing a minimum salary for beginners we do not attempt to attract the teacher interested only in the short-term career. (For the beginning teacher, man or woman, with dependents, we have provided in our recommendations a modest dependency allowance for the early steps of the schedule only.)

3. Teaching calls for a shorter work year than most fields.

The length of the school year has been increasing steadily over the past 50 years. In 1904 the school year average for all states was 147 days per year. Currently the average is 182 days. In Illinois this figure is 185 days per year. While it is still true that the school year is shorter than the normal work year, the gap is continuing to close.

While the work week for many fields has dropped in recent years to 40 and 35 hours, the teacher's work week has been increasing steadily. A recent study by the National Education Association established the average teacher's work week at something above 48 hours. More and more private enterprises are granting vacations well beyond the historical two weeks, and are recognizing an increasing number of paid holidays.

Manpower, U.S.A.

During the next ten years we will need to add 600,000 teachers at all levels of education to preserve present standards. For the period 1955-65 there will be an annual demand for elementary and secondary school teachers ranging between 125,000 and 150,000. Currently the annual production rate of new teachers is about 90,000. The Fund for the Advancement of Education recently calculated that 51.2 per cent of all college graduates would be required for our elementary and secondary schools between 1956 and 1970 if present standards are to be preserved. This is obviously an unrealistic expectation.

As business men, we cannot help but call attention to the economic facts of this condition. When demand substantially exceeds supply, a number of things can happen. One is that the cost of the item goes up. Another is that low grade substitutes begin to flood the market. Another is that new and sometimes dramatic resources are discovered or invented to produce a high quality solution to the shortage. We cannot control these laws of supply and demand. We pay the higher price if we desire the commodity. We, as your committee, deplore the implications of low-quality substitutes, for we see the vast vacuum into which may drift those individuals who are unsuccessful, discontented, intellectually and emotionally insecure, and lacking in wisdom and strength.

The Place of Teaching

We have been made sharply aware of the critical shortages of professional manpower in other fields through dramatic advertisements and otherwise: 80,000 more scientists needed by 1965; 100,000 more engineers needed by 1965; 45,000 more physicians needed by 1965. Grave as these needs are, they are overshadowed by the need for 600,000 teachers in our schools and colleges in the same period.

The Educational Policies Commission in 1956 stated: "The teacher shortage aggravates directly and insidiously shortages in all other fields in which education is required by limiting or reducing the educational achievement of youth in schools and colleges. It has unique potency to multiply other manpower shortages."

The Challenge to Winnetka

The committee has weighed carefully its role in the national scene. It has concluded that the people of the United States want to keep the control of, and responsibility for, public education largely at the local level. Federal and state regulatory and fiscal powers in the field of education are distasteful to most Americans. Accordingly, we have concluded that if measures are to be taken to reverse the growing manpower and quality deficit in education, such measures must be taken by courageous boards in communities like Winnetka.

We do not presume that the creation of a dignified professional compensation policy in this Village will by some magic promptly correct the scandalous tradition of low teaching salaries so long dominant in our land. However, we do believe that what is accomplished here will have a lifting effect considerably beyond our own boundaries. **End**

Copies of the complete Winnetka report are available at 50¢ apiece from:
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